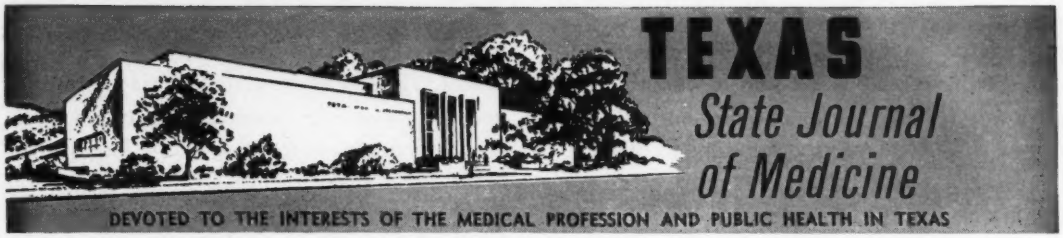

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The Case of the False Image

Over a period of years, medicine has been confronted with criticism in regard to a shortage of physicians. Some people charge that medical societies largely are responsible, primarily by controlling the number of students who enter medical schools. Actually, this charge is false. Nevertheless, it does represent one of medicine's foremost public relations problems.

In order to correct this image, the Texas Medical Association has adopted effective, positive programs. A multiphased approach has paid dividends over the years; many informed leaders in Texas now recognize that the medical profession is endeavoring to provide an adequate number of physicians to render good medical care to the entire population of the state.

During the past 7 years, the Association has conducted surveys on doctor distribution. Inquiries were directed to mayors and civic leaders of communities in Texas with a population of 700 or more. Letters also were sent to physicians. Perhaps surprisingly, their responses indicate that they are considerably more concerned than civic leaders about the need for more doctors.

Most significantly, from this continuing survey, there is evidence to suggest that there is no serious shortage of physicians in Texas. Nevertheless, there are some realistic problems in distribution. Several large cities have an over-supply, whereas there is a need for additional medical manpower in some communities and rural areas. The Association has encouraged physicians to locate in needy areas through its Physicians Placement Service. This Service is designed to bring together two groups: physicians who are seeking a

place to practice and communities which need and can support a doctor. This service is greatly appreciated by those civic leaders whose communities have received assistance. The program obviously serves a useful purpose, not only for doctors who are exploring locations to practice, but also for established physicians who are seeking associates and partners.

The Association also recognizes its responsibility in providing a greater supply of physicians to meet the future needs of the state. Like many other sections of the country, Texas is in a period of dynamic growth. The state's population has increased by 2,000,000 since 1950, and the present population is 9,700,000. Several research institutions predict that it will be between 12,000,000 and 13,000,000 by 1975. Even though a net of 2,000 additional physicians have joined the Association since 1950, it is imperative that the supply of physicians keep pace with this population trend. To achieve this objective the Association's House of Delegates has advocated erection of a fourth medical school in the state.

The Association has provided both leadership and initiative, and officers were gratified when a year ago last summer the State Legislature authorized establishment of a new medical school in San Antonio. Even before actual construction begins, however, the Association has turned its attention to the ultimate need for a fifth facility. The Chairman of the Legislative Budget Board, the Honorable Ben Ramsey, has asked the Association to investigate the needs for a new basic science medical school and to explore other ways to fill the vacancies in the junior classes at existing medical schools. The Association has been requested to present its findings and recommendations by 1962. With developments such as these, and with the large number of doctors who continue to move to Texas from other states, the supply of physicians can be expected to increase substantially by 1975. Association membership is expected to increase from 8,300 at present to between 12,000 and 13,000 by 1975.

The Association also has encouraged qualified young men and women to pursue a medical education, and has assisted them to remain in school. Though many activities are significant, one, in particular, deserves recognition: The Association administers one of the largest loan funds in the country. The Dr. S. E. Thompson Fund presented is available to students at The University of Texas Medical Branch, and it probably will be extended to students at Southwestern Medical School. This fund, representing a bequest from a past president of the Association, has assets of $750,000. Students may borrow as much as $3,000 while in medical school, but not more than $1,000 in any one school year. The interest rate is 4 per cent annually; it is not necessary for the borrower to start repayment until 4 years after graduation. This is a permanent fund, and only dividends from investments, rather than the principal, are used for loans. Even so, assistance can be provided to a significant number of students. During this coming year, the Association expects to award as many as 80 loans of $500 each.

In substance, the Texas Medical Association is engaged in many effective programs which refute the charge that medical societies are responsible for limiting the supply of physicians. The Association is providing leadership and initiative in making available more facilities for educating physicians; it is continuing its studies in doctor distribution; it is endeavoring to place physicians in areas where they are most needed; and it is providing financial assistance to students through a $750,000 loan fund.

The Use of Rehabilitation

Rehabilitation is variously defined, but in general it is a planned attempt by use of all available means to restore or improve the health, usefulness, and happiness of those who have suffered injury or who are recovering from disease. All medical treatment has basically no other aim. Rehabilitation principles

apply to all forms of medical and surgical disability or loss of physical and psychologic function resulting from prolonged illness.

Although provision of rehabilitation is often complex, it can be conducted effectively at home or on the community level in most cases. The physician must see that the patient receives the necessary rehabilitative services, which he should prescribe individually and specifically.

Important points in prescription of any rehabilitation program are:

1. That it should be progressive, but kept well within the limits of endurance and fatigue of the patient, increasing in content and strenuousness as the patient begins to recover.
2. That the methods and techniques used should be well balanced and adequately administered.
3. That the program should provide for periods of mental relaxation and recreation.
4. That it should be under close medical supervision.
5. That it should be started early to prevent severe impairment and deformities.

The physician should ascertain that auxiliary personnel have had adequate training and experience to administer prescribed procedures. Such personnel can provide therapy only in their own areas of competency; a physical therapist, for example, cannot teach speech.

The physician should apply rehabilitation methods insofar as his facilities and training permit. Any physician can read a simple roentgenogram or can set an uncomplicated fracture with satisfactory results. However, when complications occur, a specialist in the appropriate field is consulted. Similarly, if rehabilitation for the severely disabled is to be scientific and efficient, appropriate methods must be used in proper sequence during recovery. The prescription of these methods can not be left safely to the haphazard device of any therapist who happens to possess some knowledge of neuromuscular dysfunctions or musculoskeletal disorders. Indiscriminate application of "exercises" and other rehabilitative procedures may cause far more mental, emotional, and physical damage than good. This scientific form of treatment is constantly changing with new developments in understanding and application of neuromuscular physiology. Through the efforts of workers in several fields, but mainly of those in physical medicine, improved techniques of neuromuscular re-education and rehabilitation are being created almost daily, providing physicians with better means to restore patients to functional usefulness. It is obvious that a busy neurosurgeon, orthopedist, internist, or pediatrician will not have time to master the intricate details of these modern techniques, nor will he have time to supervise the auxiliary staff to assure their proper application.

Intelligent treatment of a severely disabled patient requires a total approach which can best be provided in rehabilitation centers especially oriented for such service. These institutions have adequate facilities and staffs or well trained therapists and auxiliary personnel supervised by a physiatrist.

As with any other medical or surgical treatment, a rehabilitation procedure should be applied with understanding of expected benefits and limitations. Every physician should use these methods when indicated, starting them early at the bedside, and continuing them long enough to restore the patient to the fullest functional ability of which he is capable. This is often a long and arduous task that requires patience and understanding on the part of the physician, who must provide encouragement and motivation to his patient.

—Odon F. von Werssowetz, M.D.,
Gonzales, Texas.

Mrs. O'Leary's Cow

Eighty-nine years ago, a cow caused $175,000,000 worth of property damage. When Mrs. O'Leary's cow kicked over a lantern in a barn,

the Great Chicago Fire began. During the 3 days in which the fire raged, 17,430 buildings were destroyed and 250 people lost their lives.

The cost of this, one of the world's greatest calamities, is small, however, compared with today's losses from fires. In 1959 alone, an estimated $1,275,000,000 worth of damage was done to property. During that same year more than 11,000 persons were killed, and many others were seriously injured.

No one is better aware of the toll that fire exacts than physicians. They treat its victims—sometimes without avail—and sign death certificates for those not fortunate enough to survive. Thus, they, perhaps more logically than any other group, are fit to be leaders in the fire prevention crusade.

During Fire Prevention Week, October 9-15, physicians can urge others to examine their homes for potential fire hazards and to work out plans of escape in case of fire. They can emphasize the dangers of carelessness with matches and cigarettes.

They should not, however, forget their own homes and families.

Scientific Exhibits

Between the date many useful ideas are announced in the medical literature and their general application in practice, there is often a regrettable lag in time. The reason, of course, is that few busy physicians have the opportunity even to skim the thousands of pages necessary every month to keep abreast of the newer advances.

Most specialists and research investigators are prompt to publicize their discoveries, but the problem is how to bring new ideas impressively to the attention of practitioners who need them most. Scientific exhibits offer one of the most effective mechanisms, and they should be used more generously for this purpose.

Any intelligent advance planning must consider the functions assigned to the exhibits. Presumably the displays would serve the following purposes:

1. To provide an opportunity for physicians to show the types of scientific work being done in the state.
2. To offer the membership a quick review of advances in medicine and to clarify and emphasize important issues and principles of value in practice.

The quality of the scientific exhibit at the Annual Session has improved dramatically in recent years, and it now represents one of the most significant educational features of the meeting. Nevertheless, in order to achieve fully the two stipulated objectives, new ideas and promotion must be initiated continuously. The trend in recent years toward heavy outlays in expense has discouraged some physicians who otherwise would like to show their work. This influence, therefore, is not in the best interests of free dissemination of knowledge.

Committee members have prepared a circular that outlines subjects for exhibits which can be prepared inexpensively with placards, films, and colored photographs. It presents ideas of immediate practical value in the care of patients. Circulars are being distributed to secretaries of county medical societies. Copies are also available for interested Association members to give them ideas of the type of exhibits wanted. Members of the Committee hope to have a generous response in applications for exhibit space in Galveston next year.

—J. Edward Johnson, M.D., Austin,
Chairman, Committee on Scientific Exhibits.

Ambulances and Traffic Laws

Ambulances with wailing sirens and flashing red lights are part of the American scene in most places, but not in all. Speeding ambulances are at least as dangerous as any other speeding vehicle—more in fact, because they often break other traffic laws (red lights, stop signs, one-way traffic and so on). Wailing sirens may shake the patient's composure, and a

fast rough ride will impair his comfort. Sirens rattle people and upset the steady flow of traffic—all this nearly always without need.

It is rare enough that saving a few minutes' transportation time saves a life. Nearly always the increased danger of a traffic accident exceeds the possible harm from delay.

Several cities, such as New York and, more recently, San Antonio, have done away with all prerogatives of ambulances and make them obey traffic laws just like any other vehicle. The results are good, and these cities will not go back to the previous rules which permitted ambulances to disregard traffic laws.

The Committee on Transportation Safety of Texas Medical Association recently suggested to the Texas Funeral Directors and Embalmers Association that it urge its members to refrain from speeding and breaking other traffic laws in ambulance work. It is easier to induce a group of people to police themselves than to have hundreds of communities pass new laws.

The Texas Funeral Directors and Embalmers Association received the committee's suggestion well, and at its recent annual convention resolved to support actively "efforts by medical associations and other interested groups toward the reduction of excessive speeds [by ambulances]."

The Committee on Transportation Safety congratulates the Texas Funeral Directors and Embalmers Association on their cooperation and understanding. It is now a matter of record that responsible funeral directors of Texas do not want their ambulances to speed and break traffic laws.

Physicians should express their satisfaction to ambulance operators who observe the traffic laws and should explain to the public in general and to patients' families in particular that a wailing siren increases the patient's worry about himself and that an ambulance driver's disregard for traffic laws does not help the patient's chances for recovery, but exposes him and others to grave danger.

—HEINRICH LAMM, M.D., Chairman,
Texas Medical Association.
Committee on Transportation Safety,

Normality - - A UT Professor Describes It

Dr. Robert F. Peck of The University of Texas Department of Psychology at Austin described "normality" thus in a recent issue of *Life:*

"What is it to be 'normal'? It is to be unreasonable with one's spouse, or children, several times a week, yet try in a fumbling, half inept, but sincere way to make it up. It is to spend money foolishly, then work hard to stretch what's left till pay day. It is to work all your life as a railroad man, wishing you'd finished school and gone into law, yet proud of your 25 years of service. It is to get drunk every week for years, then 'get religion' and stop drinking, start doing church work. It is to marry in haste, divorce in haste, and marry 5 years later to a person you love all the rest of your life.

"Are there completely happy people? No, we find no one whose life is, and has been, without some hard-hitting frustration or some profound sorrow. When a beloved parent dies, or a just-grown child—what door of escape is there? There is no way out of the grief except to live through it.

"For more than half of us, life is a matter of settling for a good deal less than we want. We know it; we've known it for years; and we are decidedly not happy at the many moments when we think about our losses, our disappointments and our never-will-be's. For such of us, life is never brilliantly happy. Unalloyed joy is an unknown or forgotten sensation. Too many hurts, big and little, have chipped the bright colors away."

President's Page

AMEF PARTICIPATION URGED

DR. OWEN

A serious deficit of between $15,000,000 and $20,000,000 exists in the operational funds of the approximate 84 United States medical schools. Obviously, if this deficit is not met, the quality of medical education will deteriorate. No one should be more interested in adequate medical education than the individual physician.

There are many ways in which this money can be raised, other than by acceptance of funds from the Federal government. In the latter instance, governmental officials, as "holders of the purse strings," would be in a position to dictate operational policy.

Obviously, physicians cannot meet the deficit alone. However, through widespread participation in the American Fund for Medical Education, each can do his part to help prevent the decay of America's medical education systems.

Private sources, such as business, industry, foundations, and unions —all have a stake in good medicine. Representatives of these groups, when properly approached by workers in the National Fund for Medical Education who can cite the leadership of physicians in this effort, would provide the needed amount of money. Funds contributed to the AMEF are distributed to medical school "Deans' Discretionary Funds" to be used where they can do the most good.

We are faced with two grave dangers—possible deterioration of the quality of our medical schools and possible complete socialization if Federal aid is accepted.

Let's join together in firm, unfaltering support of the American Medical Education Fund. It is hoped that all Texas physicians will participate in the Fund's drive during October. Contributions may be given to the AMEF chairman of the local county medical society, or may be sent to Mr. C. Lincoln Williston, Executive Secretary, Texas Medical Association, 1801 North Lamar, Austin.

May Owen

Unusual Urologic Problems In Infants and Children

Nine of the most unusual cases of the approximately 6,000 radiographic examinations performed in infants and children at the Texas Children's Hospital in Houston during the last 5 years are presented. They demonstrate the bizarre nature of symptoms produced by diseases of the urinary tract in the pediatric age group.

EDWARD B. SINGLETON, M.D.
HOUSTON, TEXAS

AFFLICTIONS of the urinary tract are being recognized with greater frequency in the pediatric patient, particularly in the infant age group. This is largely the result of an increasing awareness by the pediatrician of the many variations in symptoms both objective and subjective which urinary tract abnormalities may produce.

These symptoms may mimic a host of lesions of the alimentary tract or the central nervous system or at times consist simply of failure of the infant to thrive. Symptoms directly connected with the urinary tract may be absent and it is only by radiographic investigation that the causative urologic problem can be identified. This is especially true in the young infant, often the neonate, with an obstructive lesion. Consequently, physicians who have the opportunity to see a large number of these patients frequently wonder if it would not be desirable to perform intravenous pyelography routinely on all young infants as part of the general physical examination.

Because of the close affiliation in Houston of the Children's Hospital with St. Luke's Hospital, which is the urologic hospital in the Texas Medical Center, an unusually large number of abnormalities of the genitourinary tract have been seen in the pediatric age group. Investigation has resulted in nearly 6,000 radiographic procedures being performed on pediatric patients during the past 5 years. Of this number, there have been approximately 3,100 intravenous pyelograms and on no occasion has there been failure of the injection being made intravenously. This success is believed to be the result of routinely utilizing an ordinary scalp vein infusion set for the intra-

Fig. 1. Case 1. Renal lymphoma. Excretory pyelograms show enlargement of both kidneys with distortion of collecting structures.

venous puncture. This avoids the difficulty of attempting to maintain by manual means a needle within the vein of a struggling infant. This procedure has been described elsewhere.[13] Each examination is aided by giving a carbonated beverage prior to filming. There have been no serious reactions.

In the preparation of this paper, the difficulty has been in choosing a few of the most unusual cases. The selection was made from a large number of conditions comprising essentially all of the genitourinary abnormalities listed in the diagnostic code of the American Medical Association.[16] The most common serious lesion affecting the infant was some form of urinary tract obstruction produced either by external compression or by an intrinsic congenital defect. In the older child with a urologic disorder, urinary tract infection was commonly present, but even in these cases there was a high percentage of underlying congenital obstructions.

Case Reports

CASE 1.—G.T.M., a 7 year old white boy, had swelling of the lymphatic glands in the right side of his neck when seen in December, 1958. Complete blood count was normal and the adenopathy was considered of inflammatory origin. During the ensuing months, he began to fatigue easily and to lose weight. Additional medical consultation in May, 1959, disclosed matted nodes in the right side of the neck, as well as bilateral upper abdominal masses. Biopsy of the cervical adenopathy was reported as "benign lymphoma of the reticulum cell type."

The child was referred to the Texas Children's Hospital early in the summer of 1959 for further evaluation. Urinalysis, complete blood count, and bone marrow studies were normal. Excretory pyelograms showed enlargement of each kidney (fig. 1). Concentration of the contrast material was slightly decreased, the collecting structures were elongated, and mild calectasia was present. Needle biopsy of the kidney was interpreted as lymphoma of the lymphoblastic type, but Hodgkin's disease could not be excluded. The patient was treated with chlorambucil with prompt regression of symptoms. Excretory pyelograms made 2 months later showed regression in the size of the kidneys and excretory urograms were essentially normal. The patient has continued to receive maintenance doses of chlorambucil and has remained well.

Discussion.—Although diffuse leukemic infiltration of the kidneys is a common complication of leukemia, occurring in approximately 63 per cent of individuals with this illness,[6] isolated lymphoblastoma of the kidneys is rare. In 1946, Foged[5] reported a case of bilateral leukemic infiltration of the kidneys in a 2 year old child with normal blood picture and without splenomegaly or lymphadenopathy. This child later had typical lymphatic leukemia. Gowdey and Neuhauser[6] stressed the fact that enlargement of the kidneys may be a presenting sign in patients with unsuspected leukemia. Although the patient reported may eventually have clinical and hematologic features of leukemia, 1 year after detection of the renal lesion there was no evidence of this. The favorable response to treatment is gratifying, but is not unusual in any type of renal lymphoma.

The radiographic features of renal lymphoma of the infiltrative or diffuse type are characteristic. Figure 2 is an example of leukemic involvement of the kidneys in a 2 year old child who had advanced clinical and hematologic evidence of this condition. In such conditions, there is generalized enlargement of the renal shadows with usually normal and prompt concentration of intravenously injected contrast material. The calyces and infundibula are elongated, but without evidence of obstruction or of filling defect. In the pediatric patient, the condition may be confused with bilateral Wilm's tumors. In this condition, however, there is absence of generalized renal enlargement, and the collecting system is distorted and displaced by the adjacent mass rather than showing the elongation characteristic of lymphomatous involvement. The condition may more easily be confused with polycystic kidneys, but in this condition there is usually diminished renal function and multiple rounded filling defects distort the pelvis and calyceal pattern.

CASE 2.—R.O., a 3½ year old white boy, was seen at the Texas Children's Hospital for evaluation of hematuria of 2 weeks' duration. In addition, there was history of abdominal pain, fever, and frequency of urination which had been considered the result of urinary tract infection and

accordingly antibiotics had been given with improvement. Hematuria, however, had persisted. Physical examination disclosed no abnormal abdominal masses and was in all respects normal. Laboratory studies showed normal blood chemistry data. Urinalysis revealed numerous white cells and 8 to 15 red cells per high power field, and urine culture Micrococcus pyogenes and Alcalgenes faecalis. Excretory urography showed a normal left urinary tract, but a non-functioning right kidney. Retrograde pyelograms showed hydronephrosis of the right collecting system with obstruction at the ureteropelvic junction and, in addition, a large olive shaped mass within the midportion of the ureter (fig. 3).

At surgical exploration a hydronephrotic right kidney which was found was caused by stricture of the ureteropelvic junction, and there was also an intraluminal mass of the midureter. Right nephrectomy and ureterectomy were performed. Microscopic examination of the tumor showed the histologic features of renal cell carcinoma (hypernephroma). There was evidence of extension through the muscular layer, but no evidence of vascular invasion. In addition there was no evidence of neoplasm involving the kidney. The patient was well more than 3 years after surgery.

Discussion.—Hypernephroma derived its name from the erroneous impression that the neoplasm had its origin in rests of adrenal cortex which had been included in the kidney. A more accurate term is renal cell carcinoma in that it now is believed that these neoplasms arise from the renal tubular epithelium. Consequently, one cannot help but be puzzled over the presence of renal cell carcinoma arising from the ureter, but histologically the neoplasm showed typical features of this type of neoplasm. One must, therefore, postulate that its origin was from a mesonephric rest of the ureter. To the best of my knowledge this is the only reported example of a ureteral hypernephroma. Renal cell carcinoma involving the kidney is extremely rare; according to Stahl[15] only 11 cases have been reported in the pediatric age group. I have seen one renal cell carcinoma of the kidney in a 5 year old child at Texas Children's Hospital who was treated successfully by nephrectomy.

Fig. 2. Diffuse leukemic infiltration of the kidney in a 2 year old child.

CASE 3.—D.A.F., a 12 year old white boy, had complained of epigastric pain intermittently for several years. Six weeks prior to hospitalization the patient fell from a tree and sustained an injury to his left flank. Since that time, he had had tenderness in the left flank and in the left costovertebral angle. Physical examination showed a well developed boy whose only complaint was tenderness over the left costophrenic angle and in the left upper quadrant. Palpation of the abdomen showed no evidence of abdominal masses or other abnormalities. Blood count and urinalysis were normal. Excretory pyelograms showed no abnormality of the right upper urinary tract (fig. 4).

Mild hydronephrosis of the left kidney was present, as the result of obstruction near the ureteropelvic junction. Retrograde studies showed the tip of the left ureteral catheter to be coiled at the point of the obstruction noted on excretory studies. In addition, there was a filling defect in the proximal portion of the left ureter, with finger-like projections of the radiolucent mass into the opaque column of contrast material. Laparotomy confirmed the presence of a ureteral neoplasm. The upper third of the ureter containing the neoplasm was resected and end to end anastomosis performed. The patient recovered from the surgical procedure uneventfully and has remained well to date. Pathologic diagnosis was ureteral fibroma.

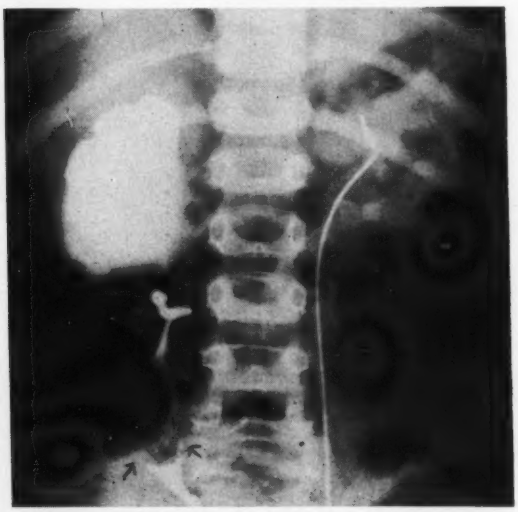

Fig. 3. Case 2. Hypernephroma of ureter. Retrograde studies showing obstruction at ureteropelvic junction due to congenital stricture, as well as filling defect in midportion of right ureter representing hypernephroma.

Discussion.—Ureteral neoplasms are extremely uncommon in children and when discovered are nearly always benign.[2] Fite[4] reported a ureteral polyp arising from a ureteral valve near the ureteropelvic junction somewhat similar to the present case. Leader[9] emphasizes the significance of the "circle sign" in ureteral neoplasms. The coiling of the tip of the catheter upon itself produced by the ureteral obstruction is presumptive evidence that the obstruction is caused by neoplasm rather than by other forms of obstruction. It is difficult to determine whether the patient's long history of epigastric pain was related to the ureteral lesion. Occasionally, abdominal symptoms occur in lesions of the ureter as well as of the kidney because of the sensitive nature of the retroperitoneal nerve reflexes.[1] Consequently, radiologic investigation of the urologic system is indicated in any patient with prolonged and unexplained abdominal pain.

CASE 4.—M.G.H., an 18 month old white male, had a history of periodic episodes of diarrhea, irritability, and fever intermittently since birth. During a recent occurrence of this illness, pyuria was discovered and excretory pyelograms showed the presence of hydronephrosis bilaterally. The infant was referred to Texas Children's Hospital. Further historical evaluation disclosed that the patient had had frequent urination accompanied by straining.

At physical examination there was a palpable mass in the right flank and a palpable distended urinary bladder. Retrograde studies of the left upper urinary tract (fig. 5) showed mild dilatation of the left ureter without gross anatomic changes in the minor calyces of the kidney. The left ureter was tortuous and its lower portion was displaced laterally by the distended bladder. Retrograde pyelograms of the right side showed the right ureter to be dilated tremendously and tortuous with comparable dilatation of the right renal pelvis and calyces. A drainage film showed bilateral delay in emptying, more severe on the right. A cystogram showed vesicoureteral reflux on the right as well as a smooth round filling defect in the central portion of the bladder. At surgical exploration of the pelvis a large retrovesical cyst extended superiorly from its attachment at the proximal portion of the bladder and distorted the trigone and ureteral orifices. The cyst was excised and a cystotomy tube inserted into the bladder. Pathologic diag-

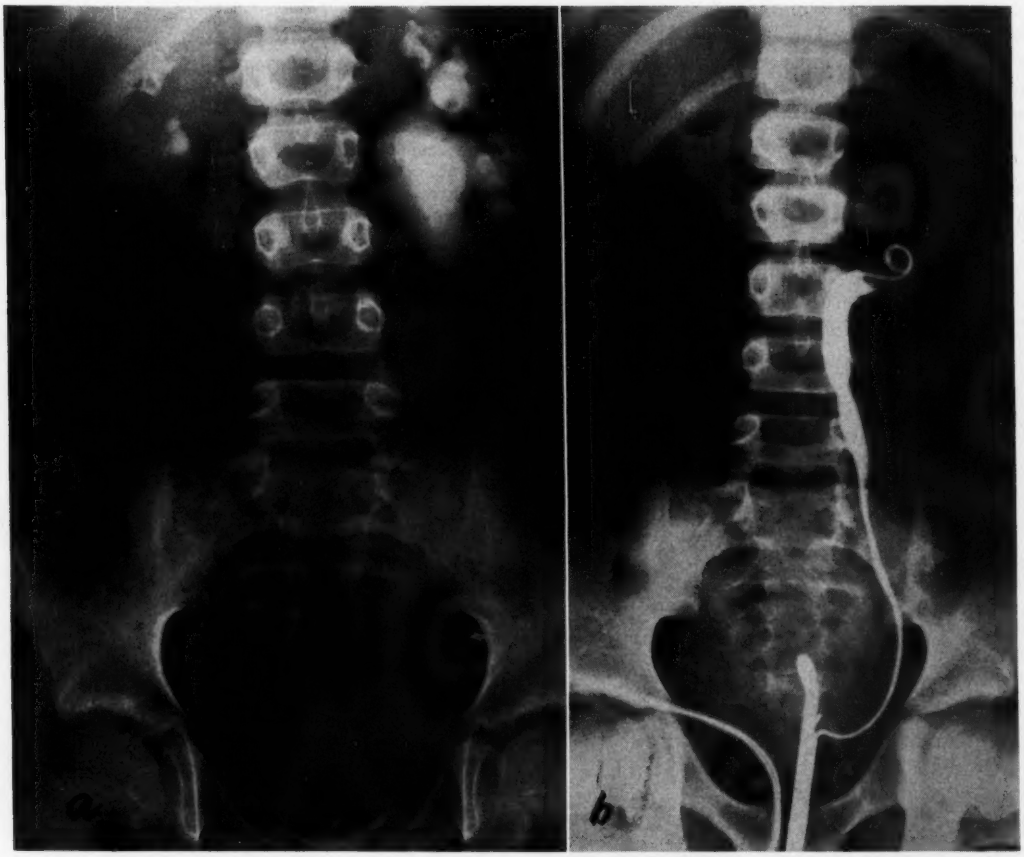

Fig. 4. Case 3. Ureterofibroma. **a.** Excretory pyelograms showing obstruction near left ureteropelvic junction. **b.** Retrograde studies showing obstruction to passage of catheter, with coiling of this structure (circle sign) at point of obstruction.

nosis was mullerian duct cyst. After 6 months of continuous bladder drainage, excretory pyelograms showed persistent absence of function of the right kidney, but an essentially normal left upper urinary tract. Right nephroureterectomy was performed; the patient recovered uneventfully and has remained well.

Discussion.—The mullerian ducts arise during the undifferentiated stages of embryonic development and ultimately form the fallopian tubes, uterus, and upper vagina in the female. In the male the ducts regress except for the cranial ends which persist as the appendices testes and the fused caudal ends which form the prostatic utricle. Failure of normal regression in the male may result in a cystic structure posterior to the prostatic urethra and neck of the bladder and, depending upon its size, may produce obstructive symptoms of both urinary tract and rectum.

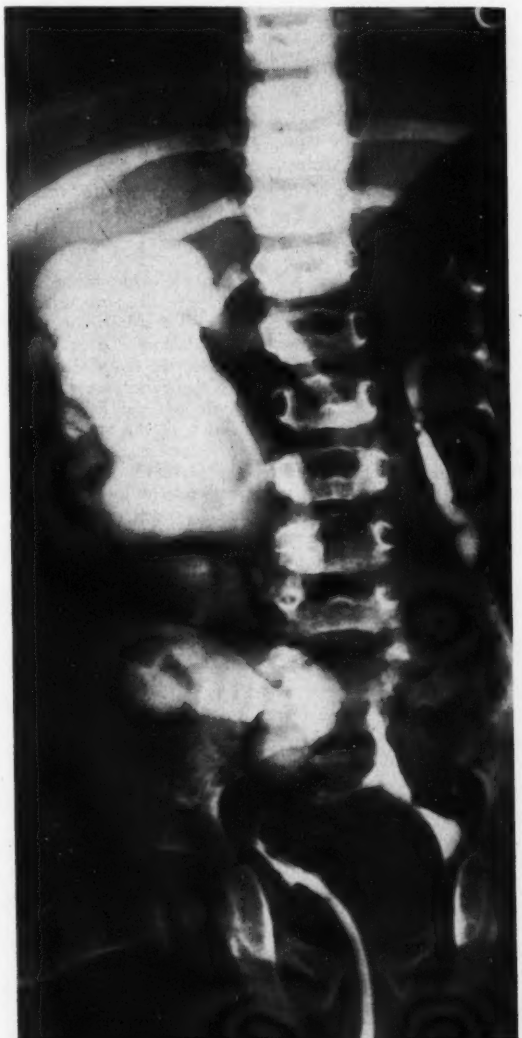

Fig. 5. Case 4. Mullerian duct cyst. Retrograde studies show bilateral hydroureter and hydronephrosis on the right. Large filling defect identified in partially filled bladder.

In addition, calculi have been reported within these cysts in children.[14] The condition is usually first discovered in adulthood.[10] The size of the cyst in this case had produced not only compression on the prostatic urethra and bladder neck, but also had distorted the trigone and interfered with ureteral drainage. Radiographs of the colon were not performed before surgery. Because the episodes of diarrhea ceased after removal of the mullerian duct cyst, it is highly probable that partial obstruction of the rectum had caused recurrent episodes of constipation and diarrhea.

CASE 5.—D. D., a 3 month old Negro male, was noted at birth to have absence of the musculature of the anterior abdominal wall. A few weeks after birth a mass was palpated in the left flank. Laboratory studies showed blood urea nitrogen of 33 mg. per cent, normal complete blood count, and pyuria.

Abdominal radiographs showed bulging of each flank as the result of the deficient abdominal musculature. Gas filled bowel was identified in the right half of the abdomen, but the left side was occupied by a large mass of homogeneous density (fig. 6). Excretory pyelograms showed absence of concentration of both upper urinary tracts. Cystogram showed distention of the urinary bladder, which was anteverted with the bladder neck lying superior to the body of the urinary bladder, as a result of inadequate support of the anterior abdominal wall. There was bilateral vesicoureteral reflux with associated hydroureter and hydronephrosis of each upper urinary tract, more severe on the left. The left renal collecting system was extensively dilated, and was responsible for the mass identified on the initial scout film. Cystoscopy showed no evidence of bladder neck obstruction. The infant died from severe bronchopneumonia before corrective procedures could be carried out.

Discussion.—Agenesis of the abdominal wall musculature is rare and is usually associated with abnormalities of the urinary tract, the most common of these being hydroureter and hydronephrosis. The cause of this relationship is unknown, but apparently is the result of the absence of the normal detrusor effect of the abdominal muscles in micturition. This in turn causes dilatation of the bladder, hydroureter, and hydronephrosis. With weakness of the abdominal wall the normal pressure relationship between the urinary tracts and the surrounding intra-abdominal area is disrupted, with dilatation of the urinary pathways as a compensatory phenomenon. Many infants affected with this condition die of severe urinary tract infection or uremia.[12] Treatment consists of maintenance of adequate urinary drainage, prevention of urinary tract infection, and abdominal support obtained by plastic procedures of the abdominal wall and by use of external support.[8] This case showed the unique feature of an inverted urinary bladder with the fundus actually lying below the level of the bladder neck.

CASE 6.—R.R.A., a 9 month old white male, was referred to the Texas Children's Hospital for evaluation of chronic constipation since birth. At 5 months of age, the abdomen was noted to be unusually protuberant and this had become progressively more noticeable. Three to four months before hospital admission the patient was noted to have obvious straining and difficulty in beginning urination and this also at times was accompanied by obvious discomfort. The patient's motor and mental development also were retarded, comparable to that of a 4 to 5 month old infant.

Dr. Edward B. Singleton, of the Department of Radiology at the Texas Children's and St. Luke's Episcopal Hospitals in Houston, presented this paper before the Section on Pediatrics on April 12, 1960, at the Texas Medical Association's Annual Session in Fort Worth.

At physical examination the abdominal musculature was abnormally lax with a large mass palpable in each flank, as well as in the lower abdomen. The facial expression was dull, the ears were small, and there were prominent epicanthral folds bilaterally. The palate was high and arched and occular hypertelorism was present. The scrotum did not contain testes, and rectal examination showed no evidence of the prostate or seminal vesicles. Blood urea nitrogen was 35 mg. per cent. Complete blood count and urinalysis were normal. Because of the presumptive diagnosis of Hirschsprung's disease, a colon examination was performed but no abnormality was found. Excretory pyelograms showed extremely poor function bilaterally with faint collection of contrast material in the periphery of what was thought to be either multiple renal cysts or hydronephrotic calyces.

Cystograms were performed and the urinary bladder was found to be extremely dilated with multiple cellules and small diverticula (fig. 7). The bladder had the shape of a tenpin and extended above the level of the umbilicus. There was bilateral vesicoureteral reflux with extensive hydroureter and bilateral hydronephrosis. Urethrogram showed the posterior urethra to be narrowed. The patient was treated by cystostomy drainage, and the blood urea nitrogen decreased to essentially normal levels. Excretory pyelograms 3 months later showed increased function, but persistent hydronephrosis and hydroureters. Cystostomy drainage is being continued with the hope of eventually providing an ileal loop form of urinary diversion.

Discussion.—The extensive abnormality of the bladder and upper urinary tracts in this patient is the result of congenital urethral stricture. After cystostomy drainage, the muscular tone of the abdomen has improved, indicating that most or all of the apparent muscular abnormality was actually diastasis secondary to stretching of the abdominal wall by the dilated urinary tract. The apparent absence of prostate, seminal vesicles, and palpable testes raised the question of the true sex of the infant. Nevertheless, microscopic examination of the oral mucous membrane showed a chromatin pattern characteristic of the male, that is, there was no evidence of peripheral chromatin masses of the cell nuclei.

CASE 7.—B.L.F. was a 3 month old white male who at 3 weeks of age was noted by the mother to have an unusually large abdomen. The patient was seen by his local physician who did not consider the abdominal prominence abnormal. During the next few weeks, the mother became more concerned about the size of the patient's abdomen, and also about his lack of growth and development as compared to his twin. Re-examination of the abdomen at that time showed evidence of enlargement as the result of a large firm mass which occupied the entire left side and the lower portion of the abdomen. The lower abdominal mass was thought to represent distended urinary bladder, and this was confirmed after catheterization with drainage of 110 cc. of clear urine. This resulted in the disappearance of the lower abdominal mass, but the left flank mass persisted.

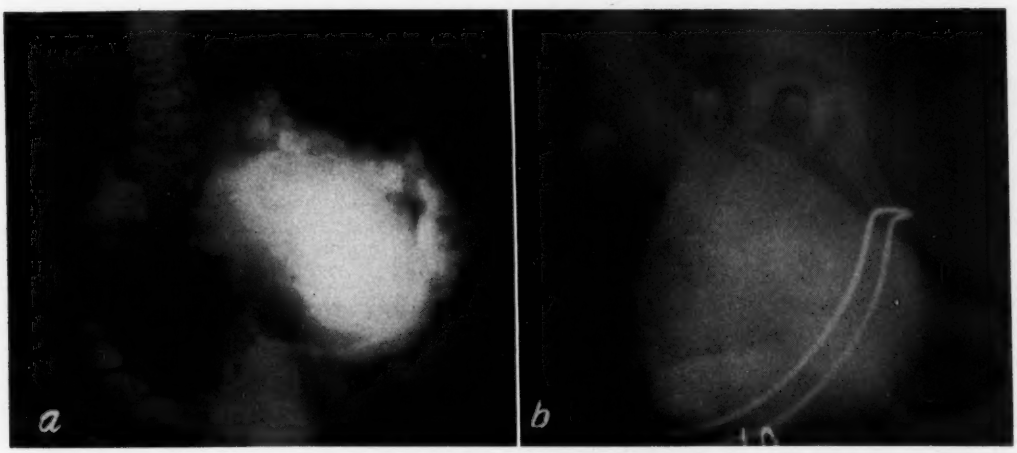

Fig. 6. Case 5. Agenesis of the abdominal musculature.
a. Cystogram shows bilateral vesicoureteral reflux with hydroureters and hydronephrosis. Mass in left flank is result of large hydronephrosis.
b. Cystogram shows bladder to be inverted with bladder neck lying superior to the fundus.

The blood urea nitrogen was 96 mg. per cent and this excluded use of excretory pyelograms to determine the status of the kidneys. Because the patient obviously had obstruction of the bladder neck, as determined by the size of the bladder and the residual urine, the mass in the left flank was thought to be a hydronephrotic kidney. The small size of the bladder neck precluded cystoscopy and retrograde pyelograms. Consequently, an F14 Deseret needle was inserted into the mass and approximately 400 cc. of dark amber urine gushed from the cannula. This was replaced by 30 cc. of 30 per cent Urokon, and multiple radiographs were obtained (fig. 8). These studies showed opacification of a large cystic structure occupying the entire left flank. It extended from nearly the level of the left hemidiaphragm caudally to the pelvis. There was no evidence of contrast material in the ureter or bladder. After several days of continuous drainage from the left renal mass, the blood urea nitrogen dropped to 33 mg. per cent. During this interval, there was essentially no drainage from the Foley catheter in the bladder. Excretory pyelograms showed poor concentration bilaterally with extensive hydronephrosis on the left, as well as associated hydroureter. No definite excretion was identified on the right and agenesis of the right kidney was suspected. Injection of contrast material into the left flank catheter showed opacification of the left renal cyst independent of the remainder of the collecting system. With persistent drainage the patient showed temporary improvement, but he died of uremia 2 months later.

Discussion.—The bladder neck obstruction and the resulting hydroureter and hydronephrosis in the present case is not an uncommon abnormality. However, when associated with what is apparently agenesis of one of the kidneys, the condition becomes more unusual. Also, the associated solitary renal cyst was unique. Although solitary renal cysts are commonplace in the adult, they are extremely rare in infants.[7] The cause of simple cyst of kidney is obscure, but in this case it apparently was of congenital origin. There was no evidence of communication between the cyst and the remaining collecting structures, but the cyst received most of the urinary output as evidenced by nearly complete absence of urinary drainage from the bladder after drainage of the cyst.

CASE 8.—R.G., a 2½ year old white male, had a history of severe episodes of pyuria during the previous 6 weeks. Physical examination showed no abnormalities, but the urine was loaded with pus cells. Excretory pyelograms showed a normal left upper urinary tract, but there was moderate hydronephrosis of the right kidney with the proximal portion of the right ureter sharply angulated medially. This was interpreted as an example of ureteral obstruction, probably secondary to retrocaval ureter. This finding was confirmed at operation, at which time a transection of the renal pelvis was performed followed by freeing of the retrocaval portion of the ureter and reanastomosis of the renal pelvis. Postoperatively the patient did well without evidence of recurrent urinary tract infection. Excretory pyelograms showed a normal right upper urinary tract.

Discussion.—Retrocaval ureter should be considered in all cases of obstruction involving the proximal third of the right ureter, especially if medial deviation of the ureter at the point of obstruction can be identified. The anomaly occurs as the result of the failure of atrophy of the primitive abdominal venous system. This system consists of three sets of bilateral venous channels:[11] the postcardinal which is lateral and ventral in position, the supracardinal which is dorsal in position, and the subcardinal veins which are located medially. The periureteric ring is formed by the anastomosis of these three vessels. Normally the ventral portion of the ring atrophies, the persistent dorsal portion becoming the adult vena cava and the normal ureter lying anterior and lateral to the vena cava. The three corresponding

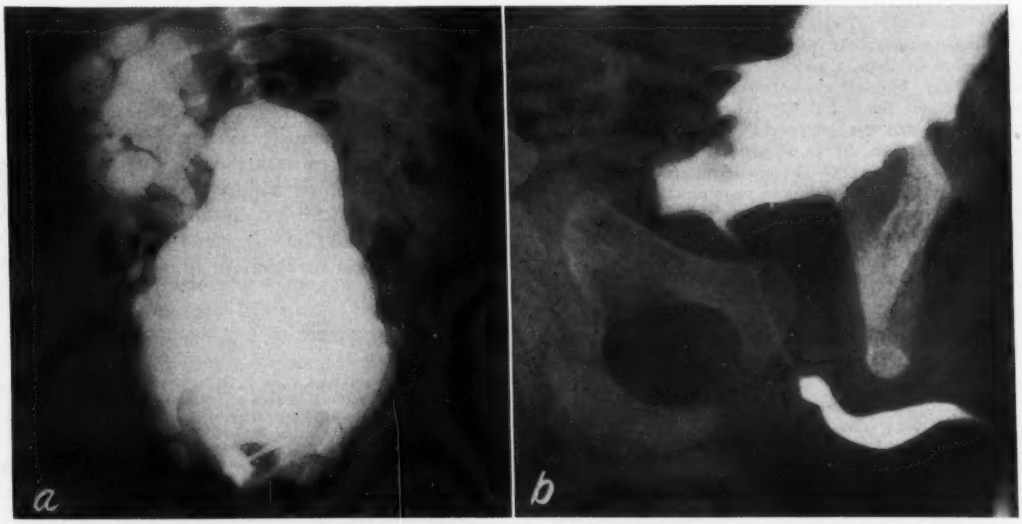

Fig. 7. Case 6. Urethral stricture with hydronephrosis. **a.** Cystogram shows extensive dilatation of bladder with bilateral vesicoureteral reflux and hydronephrosis. **b.** Urethrogram shows stricture of prostatic region.

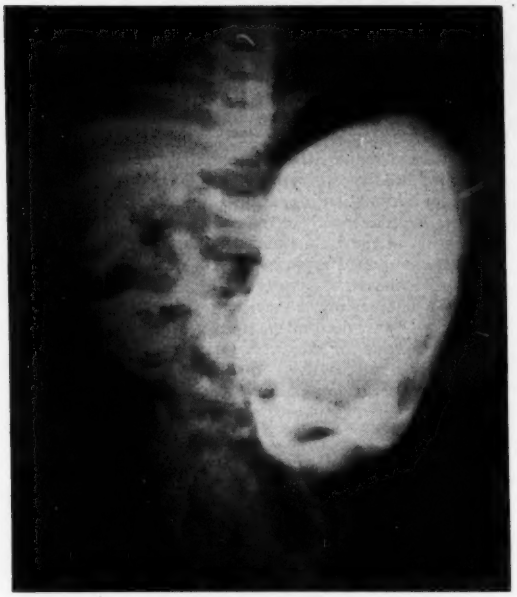

Fig. 8. Case 7. Renal cyst. Injection of cyst with contrast material shows it to be independent of remaining collecting structure of left kidney.

vessels on the left atrophy after the left renal vascular pattern has been completed. Several anomalies may occur as the result of the failure of this normal process of vascular atrophy. A retrocaval ureter results when there is persistence of the ventral channel (postcardinal vein) and associated atrophy of the dorsal (supracardinal vein).

CASE 9.—A.K., a 6 year old white female, had a history of recurrent urinary tract infection. These episodes had been accompanied by dysuria and fever, but urine cultures had been negative. Physical examination showed slight tenderness in the left flank, but was otherwise not remarkable. Urinalysis showed the presence of pyuria, but urine cultures were negative. In an abdominal scout film a stag-horn calculus occupied the left renal collecting system (fig. 9). Excretory pyelograms showed poor function on the left, but a normal right upper urinary tract. The stag-horn calculus was removed leaving the kidney. The patient has remained well since except for recurrence of a small calculus in the left renal pelvis 1 year later. Qualitative analysis showed that the stone was composed of oxalate and phosphate salts, calcium, and magnesium. Blood chemistry studies, including calcium and phosphorus, were within normal limits.

Discussion.—During the past 5 years I have seen 24 patients with concretions of the urinary tract.[3] These patients ranged in age from 4 months to fourteen years. Fifteen of them had calculi of the upper urinary tract, 6 vesical calculi, and 3 nephrocalcinosis.

The etiology underlying the cases of nephrocalcinosis consisted of idiopathic hypercalcemia, vitamin

Fig. 9. Case 9. Abdominal scout film shows stag-horn calculus occupying left collecting system.

D intoxication, and renal tubular acidosis. Most of the vesical calculi were secondary to neurogenic bladders and most upper urinary tract calculi were secondary to long standing chronic infection and obstruction. Two of the patients with upper urinary tract calculi had stag-horn concretions. In this study, there was only one Negro child, the remaining being Caucasian. Interestingly enough, there were no Latin American children even though this race constitutes a large segment of the local population. Although urinary tract calculi are unusual in the pediatric patient, they should be considered in any child having abdominal pain or recurrent urinary tract infection.

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Acknowledgement is hereby given to Dr. Thomas H. Guthrie for information regarding several of the included cases.

The Swinging Pendulum

The author observes that certain rhythms recur in ideas regarding mental hygiene. He traces the progress of several of these—causation of mental illness, ideas on child care and education, and treatment of mentally ill—and gives their present-day status.

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THE RHYTHMS of human existence have often been noted. Internally there are many—those of sleeping and waking, of eating, of working, of female sexual physiology. In addition to these internal rhythms, there are swings of ideas about practices in various aspects of mental hygiene.

Too often we have time to face only the daily issues that must be solved. I hope in these remarks to furnish the leisure to enjoy a bit of history, to fantasy about the future, to try to tease out the patterns that make up the general laws of the way the pendulum swings as regards ideas and concepts in some aspects of mental health over the years.

In college philosophy, most of us encountered the notion that the truth lies between the extremes. While everyone hopes to achieve the lofty judgment by which he knows the two extremes and then can rationally choose a middle course, many also have a yen to escape the narrow limits of reasonableness.

Physiologists state that man cannot survive without the complex controls that maintain internal chemical equilibrium. In body mechanics there are constant swings of the pendulum of ionic concentration, but the swings must be quickly damped if life is to continue. This notion of homeostasis has been applied to psychology as well. Many find this notion unsavory here; there is a faith and conviction that the human spirit ought to escape this sort of inevitability in the world of ideas and feelings. Kant decided on a mystical escape. Others, more modern, have postulated something called "spontaneity," the capacity of the human being occasionally to do some-

thing or think something entirely new and unrelated to past experience. Human-kind seems to rebel against being fenced in by predictableness—we always seem to want to keep an escape door open for doing the completely unpredictable.

The notion of the swing of the pendulum has been used in relation to human affairs. Gibbon's "The Rise and Fall of the Roman Empire" leaves the impression that an inherent quality of civilization pulls them down as well as allows them to be built. Toynbee has said much the same thing about many more civilizations. This idea of swings of opinion, and status, and ideas is well grounded. I hope to follow the hoary pattern, yet to make it interesting, in the mental health area.

Causation of Psychiatric Illness

The earliest notion was that psychiatric illness was somehow related to supernatural things. Not until Hippocrates' time were the mental illnesses regarded as "natural phenomena." Hippocrates, speaking of epilepsy, said, "It thus appears to me in no way more divine, nor more sacred than other diseases, but has a natural cause from which it originates like other affections . . . They who first referred this disease to the gods appear to me to have been just such persons as the conjurors, purificators, mountebanks and charlatans now are, who claim great piety and superior knowledge. Such persons thus . . . use divinity as a pretext and a screen for their inability to afford any assistance."

It has taken a long time for the pendulum to swing from the ancient concept of supernatural causation to the acceptance of all mental diseases as natural phenomena. The process is still not complete. Hippocrates, I think, gave the correct reason—that there is still too much "inability to afford any assistance." When there are many remedies for diseases, it is likely that none is effective to a satisfactory degree. In my time intrathecal horse serum, lithium salts, metrazol, acetyl choline, carbon dioxide, and nitrogen have all been used for the treatment of schizophrenic patients. Electroshock and insulin shock therapy persist, although interest has shifted to tranquilizing drugs. Granted that each form of shock treatment has been the best available and that each taught something about mental diseases, there was a disturbing, nonspecific character about them. In spite of wires and vials and syringes—and the poses of physicians—all such procedures are disturbingly related to the older shock treatment, the ducking stool.

The present surge of research on psychiatric disease will, I am sure, move the pendulum rapidly toward the consolidation of Hippocrates' naturalistic position. Knowledge of physiology of mental illnesses, involving biophysics and biochemistry, should keep growing; ceruloplasm, cerebrocides, serotonin, radioactive tracer substances, and fluorescent antibodies are examples of such types of research.

The person who favors the naturalistic approach might however, ask, "How do abnormal mental reactions start? What disorganizes a nicely operating system of behavior?" Then he would wallow in genetics, psychodynamics, existentialism, and psychoanalysis. Perhaps he would be driven, as some are today, into hypnotism or, as some were a few years ago, into dyanetics. I do not mean to imply equal scientific value to all of these; they merely represent the kinds of thinking possible in the issue of why mental diseases start.

Newton, Bacon, Pasteur, Lister, Koch, and a host of other post-Renaissance scientists were not greatly concerned about what starts the reactions of human beings on a trail of internal mismanagement that causes behavior characteristic of mental illness. They were more mechanically-minded and did not worry too much about first causes. If the pendulum tends to swing into the excesses of spiritualism, demonology, and punishment that have dominated at times in the past, it indicates, perhaps, that there is not enough knowledge to hold attitudes steady. Just now the pendulum is far over on the mechanistic side, and we are working hard on the problem of how things happen—the relationship of physiology to behavior. It is a reaction from recent periods of excessively theoretical psychology. But the question remains: what is the initial cause of mental illness?

As long as there are such vast areas of ignorance, we can expect wild swings of the pendulum, and many false prophets and quacks. As Cantril pointed out in "The Why of Man's Understanding," the human mind has a strong tendency to find explanations; if facts are available they will be fitted into the scheme. If not, a scheme will be produced, regardless. If the phenomenon to be explained is important enough and if no methods for solid, unassailable scientific proof are available, the scheme will probably include some irrational, probably supernatural, elements.

Ideas on Child Care

Children are remarkably tough little animals. They apparently can stand a great deal of inconsistency in the way they are managed, particularly if the inconsistencies are not present because of incompatibilities between the parents. It is because there is sound folklore knowledge of this that there are so many jokes about excesses and wild gyrations in patterns of child training advised in the past.

Among the extraordinary books I found in an old

library recently was "The Mothers' Book," a collection of articles on child rearing from the *Ladies Home Journal* published about 1911. It contained a chart divided into six columns: conduct and character building; reading, writing; science; art; exercise and games; and bed hour.

A glance under "exercise" showed that an 8 year old child should be harnessing a horse. At age 3, "button, button" and "Barberry bush" were considered suitable games. The impression one gets is that of rigorous patterns into which children were supposed to fit. As a matter of fact, under "conduct and character building" the goals in the first year were submission, obedience, and self-control.

Dr. Paul V. Lemkau, of Johns Hopkins University School of Hygiene and Public Health, Baltimore, was the principal speaker at a banquet during the Third Texas Conference on Physicians and Schools, in Dallas on April 4, 1960. His speech has been shortened for publication.

In 1732, Susannah Wesley said, among many other things that indicated she loved and valued her children highly: "In order to form the minds of children, the first thing to be done is to conquer their will, and bring them to an obedient temper. To inform the understanding is a work of time, and must with children proceed by slow degrees as they are able to bear it; but subjecting the will is a thing which must be done at once, and the sooner the better."

That the pendulum has swung away from ideas of this sort in child care is obvious. The steps by which attitudes have changed are fascinating to trace. The present place of the pendulum is somewhere between the extremes of domination of the child as a cardinal principle and that of allowing full expression of the child's impulses.

The idea of allowing the child to live without interference or curbing has been ascribed to many different people, and is usually simplified a great deal more than the alleged originator intended. The origin of the idea of allowing the child a primitive sort of freedom is often credited to Rousseau on the basis of his belief that adaptation should be to nature rather than to an effete, civilized way of life. If everyone could be primitive, all would be well. Actually, Rousseau meant something else. In fact, he advised cold baths for children to toughen them for the struggle against a relentless nature.

Freud's much popularized notion that civilization's restraints of the instinctual gratifications of man caused some mental illnesses has also been blamed for the cult of expressivism and nonrestraint. Freud, however, grew up in a patriarchal society. A plea for more freedom for children based on Freud's theory must consider that his idea of freedom may have meant more than he or his childhood friends had—not complete nonrestraint.

Nevertheless, the notion grew that the child had an innate capacity for healthy growth if his inborn tendencies were not thwarted, leading to a cult of permissiveness. During this swing of the pendulum some harmful things disappeared. Instead of being regarded as a little adult, the child was recognized as a being in his own right. It was recognized that he had a right to be fed when he was hungry, not when an adult or an alarm clock said he should be. Certainly self-demand feeding was an advance over attempts to fit infants into the Procrustean bed of a 3 or 4 hour schedule of feeding.

Mothers and fathers need not be as cruel as Watson would have had them be. He said, for example, "The infant from 8 months onward should have a special toilet seat into which he can be safely strapped. The child should be left alone in the bathroom without toys and with the door closed. Under no circumstances should the door be left open or the mother or nurse stay with the child." He added, "This is a rule which seems to be almost universally broken."

The period of permissiveness at its height was supposed to produce the sort of child described in the *New Yorker*: "I have a baby almost a year old, and he is what you might call stubborn. We have tried breaking him of getting into things by spanking and slapping his hands. But he goes right back. I have tried biting him but I was absolutely wrong as now he is biting us. What would you suggest?" The laconic suggestion was, "Kick him and run like hell."

A child psychiatrist is the person who is not allowed to run like hell, but who must stay and try to straighten out the child.

With time, the pendulum has swung from permissiveness to what Senn has described as "permissiveness with limits." He and many others have pointed out that the child is small and helpless. A limitless sea of choices for activity may frighten or bore him. In a cartoon, the child in Progressive School asks, "Do we have to do what we want to again today?"

At present the pendulum is in a healthy spot in its arc: although the parent appreciates the remarkable dependability of the child's physiologic impulses, he recognizes that his offspring is an uncivilized little animal with no experience who must learn to meet the world's requirements with the help of a presumably civilized adult, his parent. As a sociologist friend of mine says, each generation the world is threatened by a new group of uncivilized savages who have to be domesticated by the time they become adults if the world is to carry on.

In education the swing of the pendulum has been great. To a considerable degree patterns have tended to follow those outlined in the previous section on child care. For a time after the Industrial Revolution in England, infants' schools were popular; 3 year old children were chained to desks and expected to learn, an atmosphere I doubt that even Admiral Rickover would condone. As a revulsion against the rod and ruler kind of school discipline of a few generations ago, children have been given movable desks with no inkwells.

The essence of the change in education, it seems to me, accents the child's right to use what he has at his present state of development. He is valued for what he is as well as for what he may become.

The state of the world almost demands that children be regarded as potential engineers and missile builders, physicists, and medical researchers. To do such jobs they must learn a great deal about many things, and there is a tendency to be grim about their educational preparation. Doubtlessly children must suffer the burdens of the times along with adults. Perhaps, before the pendulum is given too big a push toward a program of learning only "useful" things, it should be remembered that man in the twentieth century does not live by bread—or nuclear fusion or fission—alone. When Huxley sought to let his mechanical Brave New World escape from its horrifying pattern of life, the way he chose was for a man to read Shakespeare and rediscover the beauty and dignity beyond the laboratory.

Treatment of the mentally ill will undoubtedly require much interest and some money in the next few years if the swing of the pendulum in this field is to be healthy.

In colonial days the mentally ill were cared for in their own communities. As the country became more populous, county institutions were founded. Usually they were overcrowded and contained a mixture of the mentally ill, physically ill, and paupers. They were poorly served medically and in almost every other way. Dorothea Dix's answer to the problem of this scandal was to make the mentally ill wards of the state. Her almost singlehanded efforts established the state hospital system in the United States. Conditions in state hospitals have often been far from ideal, but they were a real improvement on what was available earlier. Patients were protected from the community's teasing and disdain and were given good food and shelter while Nature, if she were kindly disposed, cured their illnesses.

As psychiatric knowledge grew, it became clear that mental illnesses were related somehow to the patient's family and to the place he lives. If he is to live there again, the character of the home and community must be considered in treatment and readjustment. Since he will return to the community, he should be treated in the community. "Treatment is most successful if carried out within the sound of the guns" was the way this was put by military psychiatrists.

Thus, the pendulum has swung from the large, isolated state hospital to hospitals close to the patients' community of origin. The hospital is no longer regarded as a refuge, but as a place where the patient gets better so that he again can live in his home. Many more patients leave mental hospitals than formerly. Some need supportive help and rehabilitation as they rejoin the local community. The accent is changing from the hospital as the lone psychiatric resource of the state. Now a system of services reaches from the home in which the illness occurs, through the mental hygiene clinic, the psychiatric service of the general hospital, the local day hospital, and, when necessary, to the state psychiatric hospital. The chain of services should be maintained for a 2-way flow—from community adjustment and back to community adjustment.

The pendulum has finally swung back to active participation of the local community in the treatment of mentally sick people.

Summary

Wise mothers have always fed hungry babies. Some "experts" are getting wise enough to advise mothers to depend on their own feelings and on the baby's physiology in other areas as well. There is a balance wheel of massed human good judgment that is not easily swung with evanescent waves of opinion and interest. Since the concept of democratic government rests on faith in the same principle, we can gamble on that wisdom serving to hold the pendulum from its wildest swings and to damp it before it goes too far, making a revolution instead of a swing.

The real trouble is lack of knowledge. If more were known, there would be fewer wild swings of opinion. If physicians knew how to cure schizophrenic patients the recurrent phenomenon of rise and fall of treatments for the disease would not have been seen; standard treatment for diabetes has been insulin since knowledge of the substance became available.

Behavior and mental disease can be understood as natural phenomena, and physicians and other scientists should continue research to the end that they be understood. Meanwhile, more swings in ways of trying to help patients must be expected. There is a duty to use the best treatment available for those whose needs cannot wait for a perfect way of management.

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The infant is not born with emotions, but has the potentials for emotional reactivity. The author describes three essential phases that mark the transition from infant organism to human being.

Foundations of Emotional Development

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OUR EMOTIONS are the price we pay for being human and living with other human beings. We are not born with emotions; fortunately, however, the infant has the potentialities for emotional reactivity. Patterns of emotionality are acquired, in one way or another, in the process of learning to be a human being. Emotions are expressed through bodily processes: amusement, by laughter; sorrow, by weeping; shame, by blushing; anger, by circulatory and metabolic changes; anxiety and guilt, by various kinds of bodily tension. Anxiety, frustration, hostility, and guilt, when repressed for long periods, cause emotional tensions which disturb not only bodily functions but also feelings about behavior. The particular pattern of emotional reactions a person acquires, however, is a product of development and learning which can be understood and changed through therapy and redirection of learning.

The shaping and the experiencing of emotionality apparently occur at three levels, each inextricably related to the other but each an avenue of access for the management of emotional development. First, there is the private feeling or affect which marks an emotional reaction. Sometimes a person can identify the objects of these feelings, positive or negative, and communicate them to other trusted individuals. At other times, he suppresses, denies to awareness, or displaces his feelings on to others. At this level, the psychiatrist and some psychologists are equipped to give guidance and to cope with the "dis-ease" which accompanies emotional disturbances. The second component, already described, is a complex set of physiologic shifts set up in nerves, viscera, glands, and muscles when emotions are experienced. Here, the physician and the psychiatrist are most deeply concerned with disturbances and modern tranquilizers are only a part of their means of controlling emotionality. Finally, there are the patterns of behavior which express the stirred-up internal states, and behind them, the feeling components. Here, the parent,

Carson McGuire, professor of educational psychology at The University of Texas, Austin, presented his paper in Dallas on April 4, 1960, during the State Conference on Physicians and Schools.

the teacher, the social worker, and other cultural agents become involved in the education and management of emotions from birth onward.

At the beginning of this article, I asserted that emotions are the price we pay for becoming human. Infants, besides being either male or female, are born different from one another in small but important ways. The problem faced by each organism at birth is to learn to be a human sufficiently like some other human beings to live with them. Human learning has a price, and that price is emotional reactivity to the cultural agents (parents, age-mates, more remote adults) who shape and guide learning experiences.

Three Necessary Phases

Three essential steps mark the transition from infant organism to human being; each lays a foundation for emotional development and learned emotional reactions:

1. Learning to be a human being occurs if, and only if, there are meaningful sequences of interactions between the learner (self) and one or more cultural agents (others). Through their actions, interactions, and reactions to the learner, these cultural agents create in the learner expectancies of supportive or nonsupportive responses to the self's behavior under varying conditions. By satisfying (rewarding) or thwarting (punishing) what self does, significant others can reinforce some patterns of behavior (neutral, or emotionally-toned) and not others. At the same time, emotional reactions are built up not only in the learner but also in closely related cultural agents.

The primary transactional feed-back relationship is that between mother and child. In the subject-object relationships of the mother-infant symbiotic unit, some degree of separation anxiety (fear of loss of love) and deprivation feelings (distress over withheld gratifications) is bound to occur as the infant and child become socialized (learns to become a human being). Separation anxiety and deprivation feelings, together with the related pattern of emotional disturbances, appear to be minimized when parents or their surrogates fulfill at least two conditions. One is that frustrations to redirect behavior, for example, weaning, toilet training, and sex-role training, are introduced gradually and in such a way that approval or disapproval of a specific performance is separated from basic acceptance or love of the developing child. Emotional disturbances are magnified, and overdependence begins, when the child is thwarted repeatedly and parental love is conditioned upon compliance to expectations. The other condition is that parental figures be consistent in their actions and reactions to the learning boy or girl. By this I mean consistently permissive, or consistently strict, or a combination of both when distinctions can be made among areas of behavior. For example, a parent may be strict with reference to aggression, firm about appropriate sex-role behavior, indulgent with regard to affection, encouraging toward some kinds of autonomy, and affectively neutral in directing achievement. The objective, with reference to emotional development, is to create a predictable world that breeds security and trust, rather than insecurity and mistrust of self and others.

2. The second essential step has to do with acquisition of language. Upon leaving infancy, the child learns that the use of words guides the behavior of another person and, furthermore, that a series of words can determine one's own or another person's thoughts, feelings, and actions. Language is made up of symbols and symbols, in turn, have meaning in terms of their reference to objects, events, ideas, other persons, and one's self. Some meanings are shared and others, to a greater or lesser degree, are private. Since they are acquired in dyadic or alpha-beta relationships, all symbols are to some extent affect-laden or emotionally-loaded. Although many words are neutral, much of our language elicits positive, ambivalent, or negative reactions which are emotionally toned. Emotionality is reduced by acquiring language habits and word avoidances. Other symbols, especially those with private meanings, are too loaded in their connotations to be used publicly. Dream work, some self reports, and projective techniques reveal substitutions, repressions, and inhibitions in the use of language which, in turn, reflect something about prior learning experiences and areas of emotional disturbances. The analyst and therapist realize that language behavior identifies not only the investment of emotional significance in an activity, object, or idea (cathexes) but also provides an avenue for release of emotional tensions through verbalization and rehearsal of an adequate solution to emotional problems which can be tried in real life.

3. The final essential step is acquisition of some sort of motivation other than immediate gratification or avoidance of deprivation, so that a person lives not only in the present but also in the past and future. Primitive emotions associated with separation anxiety, deprivation feelings, and narcissistic needs are at the mercy of mother and other family members, one's age-mates, teachers, and other representatives of community institutions who mete out immediate rewards and punishments in various forms. The next phase is to learn to value approval and to avoid failure and disapproval. Emotionally, the driving force in behavior becomes social anxiety and avoidance of being shamed. Identification with significant cultural agents causes concern about being accepted, avoided, or rejected. In emotional terms,

the price is ego-involvement with other human beings and not only the affect-laden intimacies and affection which can emerge in learning the male and female sex roles, but also disturbances marked by feelings such as frustration and hostility. Finally, a search for identity and maintenance of self-respect and self-esteem can become more important than immediate gratification, or approval from and acceptance by others. Feelings of well-being or of guilt which arise from doing or not doing what is expected of one's self are normal forms of what can become disturbed elation or depression.

My own research and that of my associates has led me to formulate what might be termed a context theory of emotional development. The approach permits an explanation of the wide variation encountered in human learning experiences and in functioning personalities. Briefly stated, the infant organism is born into a family, and various kinds of family backgrounds and dynamics can be identified. Some of the patterns of self-other relationships, language learning, and motivational orientations which influence emotional reactivity already have been outlined. But family influences do not provide a full account. In effectively functioning, compared to borderline and ineffectively functioning persons, two other contexts of human learning are influential. They are the age-mate society in which acceptance by and affiliation with one's peers become highly valued, and the school and other community settings in which more remote adult authority figures place a value upon autonomy and achievement. Essentially, the boy or girl who has had emotionally-loaded learning experiences in the family, among age-mates, and with more remote adults is a different kind of person than one who has been isolated or who has lacked acceptance by peers or, who alternatively, has been alienated from community institutions. Most certainly, the emotional development of such persons appears to differ significantly from that of an individual whose identifications have been limited to the family of orientation. By and large, the latter type of individual with an emotional disturbance has been most numerous in the case studies which undergird psychoanalytic and other views of emotional development. I am not attempting to undervalue Freudian and related views but merely to indicate a range of variations in emotionality and the complexity of influences upon personality makeup.

All else being equal, the kinds of learning experiences which produce optimal emotional development seem to bring about a mentally healthy person. Our research and case studies have caused us to value a set of attributes found in effectively functioning persons, most of whom have had a balance among familial, peer, and community experiences:

1. Clear perception and discriminating objective judgment—the ability to look at facts squarely and accurately, neither overlooking some nor exaggerating others out of proportion.

2. Autonomy and initiative—the ability and motivation to cope with events and other persons in self-starting, self-determined, and ego-directed manner, in contrast to a passive acceptance of environmental conditions and dependence upon others.

3. Self-acceptance and personal stability—a positive self-respecting attitude toward oneself combined with the necessary internal regulation of feelings and flexibility of behavior to react to events with emotions appropriate to the situation.

4. Socially-oriented achievement motivation and self-realizing drive—the urge and tendency to work hard and purposefully to use one's full powers, to achieve personally worthwhile results, and to establish efficient and effective work habits.

5. A positive attitude toward and ethical responsibility for others—basic trust in self and others; ability to differentiate the approval or disapproval of specific forms of behavior from acceptance, avoidance, or rejection of the other person; and a spontaneous, interested concern for the rights, happiness, and well-being of other human beings.

That these attributes are a possible outcome of the essential steps in becoming a human being is not too much to expect as a goal to attain.

Summary

Certain concepts of emotional development are not commonly held. Rather than accept the idea that human beings are born with specific emotions that unfold with body development, the author has indicated that we learn emotional reactions in our relationships with cultural agents. Three essential steps in becoming human are described: the self-other relationship, learning a language, and acquiring complex motivations. Each of these is emotionally loaded. The person who learns his emotions not only in the family, but also among age-mates and more remote adults in the school and other community settings probably has a greater chance of being mentally healthy than one with more restricted experiences. The healthy person has enough anxiety to go on learning and enough capacity for guilt to control his behavior. A parent who restricts opportunities for a young person to relate to people outside the family setting assumes a great deal of responsibility. Sometimes this restriction of learning contexts turns out satisfactorily. More often than not, however, parents cannot successfully provide the total range and variety of examples necessary for a child's emotional development.

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Hypnosis in Medical Practice

JOHN L. OTTO, M.D.
GALVESTON, TEXAS

A summary of a panel discussion presented before the Texas Academy of General Practice on October 7, 1959, in Galveston.

Participants were Milton H. Erickson, M.D., Phoenix, Ariz.; Esmond A. Fatter, M.D., New Orleans; and Martin L. Towler, M.D., Galveston. Dr. Erickson is a hypnotist and psychiatrist. Dr. Fatter, who is president of the Louisiana Academy of General Practice, uses hypnotism in his general practice. Dr. Towler, who is professor of neuropsychiatry at The University of Texas Medical Branch, does not use hypnotism in his practice.

John L. Otto, M.D., Galveston, who is clinical professor of neuropsychiatry at The University of Texas Medical Branch, was panel moderator and prepared the transcript of the discussion.

DR. OTTO: According to the "Encyclopedia Britannica," hypnotic phenomena were known for thousands of years by the Persian Magi, Indian Yogis and Fakirs, and were probably utilized by the aborigines even earlier in their tribal ceremonies. Scientific and medical interest was first universally aroused during the latter part of the eighteenth century by Mesmer, a Viennese physician who claimed to be able to cure many diseases by "animal magnetism." He stated that a vital magnetic fluid became stored up in living bodies, and, by its instrumentality, one individual could act on another. This method of Mesmerism was reported on adversely by several scientific commissions and fell into disuse by the medical profession. It continued to be used by charlatans and entertainers for personal gain.

In the middle of the nineteenth century, Braid, a Manchester surgeon, denied the presence of the mysterious fluid of Mesmer, but recognized that the phenomena elicited were subjective in origin. He first used the term "hypnotism" in place of "Mesmerism," and established the basis for its modern study. Before many years its use by European physicians became widespread; particularly, Liebaubt and Bernheim at Nancy laid the foundation of the school of hypnotic suggestion which is still in use. Many investigators, particularly Pierre Janet, have used hypnosis in research on the constitution of the mind.

The popularity of hypnosis as a treatment method has waxed and waned among the medical profession, and, apparently now is undergoing a cycle of popularity. Therefore, your Program Committee thought that a frank discussion of its uses and abuses would be appropriate.

DR. ERICKSON: Perhaps the first thing I ought to speak about is the rationale of interest in hypnosis. After World War I, there came about a new orientation in medicine. There was recognition of the psychosomatic aspects of medicine. With the development of psychosomatic medicine, there was laid a foundation for recognition of factors that constitute a good part of the average physician's practice. What percentage of patients go to the physician's office for psychological reasons? A man doesn't even go to see his dentist because he has an abscessed tooth, unless it hurts; he needs psychologically oriented motivation for seeking help. Most patients report for psychologic reasons.

With recognition of the tremendous importance of psychologic forces in medicine, there was a

basis for hypnosis. Use of the hypnotic method in the treatment of "shell shock," as it was called in post-World War I days, led to the discovery that hypnosis was not just a magical procedure or method of commanding away, or suggesting away, symptoms. It could be used to re-educate the patient into the problems of facing reality and utilizing his own capabilities. In the 1930's, in the psychology departments of various universities, experimental work and exploratory studies showed that hypnosis could be used in the psychologic and physiologic laboratories.

In World War II, there was tremendous stimulation of interest in hypnosis; later, because of the availability of instruction and ready communication with all parts of the world, growth of interest continued rapidly. At present, one can go to a university or can seek instruction from other qualified sources.

Hypnosis Defined

To define hypnosis: it is a state of psychologic awareness characterized by a restriction, limitation, or fixation of the attention on certain ideas. It is also characterized by receptiveness to ideas: the patient is willing to receive ideas, to examine them for their inherent worth and to accept or reject them.

If they are accepted because of inherent worth, the patient is willing to respond to them in accord with his actual capabilities. For example, if I asked a 50 year old man, "What did you wear on your fifth birthday, and what did you have for breakfast?," he would say, "That was forty-five years ago. Who would remember a thing like that—it's too hard." His answer would not be in accord with the inherent value of the question, because he did wear something and he ate something on his fifth birthday. That birthday was the culmination of a lifetime of experience for him at the age of 5. In a hypnotic trance, he would immediately start building up associations, ideas, and memories and would be able to recall the experience.

Hypnotic phenomena are based on normal psychologic behavior. In catalepsy, a patient placed in an awkward position can hold that position indefinitely. Even as you sit here in the audience, you keep your head in midline and upright by balancing your muscle action. You forget about the shoes on your feet, the glasses on your face, and the collar around your neck. Because you spontaneously develop anesthesias, you forget a great many things that you can immediately sense when attention is directed to them.

DR. OTTO: The Subcommittee on Hypnosis of the British Medical Association gave a briefer definition of hypnosis, with which the Council of the American Medical Association on Mental Health agreed.

> "A temporary condition of altered attention in the subject which may be induced by another person and in which a variety of phenomena may appear spontaneously or in response to verbal or other stimuli. These phenomena include alterations in consciousness and memory, increased susceptibility to suggestion, and the production in the subject of responses and ideas unfamiliar to him in his usual state of mind. Further, phenomena such as anesthesia, paralysis, rigidity of muscles, and vaso-motor changes can be produced and removed in the hypnotic state."

DR. FATTER: The hypnotic phenomenon apparently is a part of the constitutional makeup of a human being; in fact, it appears to be a part of lower animals, also. The hibernating bear, even though in a trance, is completely aware of his surroundings. This is a protective mechanism. If the forest catches on fire, the bear quickly awakens and flees to safety. This same phenomenon is found in the opossum. He feigns death; in that state an ant can crawl across the cornea of his eye without eliciting a response. The fawn freezes in the jungle as a protective mechanism, just as though he were made of wax or stone; he will maintain this position long beyond the endurance of voluntary control.

Savages, the American Indians, for example, induced a trance in the braves with the drum and the dance. They didn't know what the mechanism was, but they knew the end result: it raised the warrior's threshold of pain, decreased his fatigability, and decreased his fear of battle.

Dr. John L. Otto, moderator of the accompanying panel discussion, is affiliated with the Titus Harris Clinic of John Sealy Hospital in Galveston.

Patients have the ability to utilize this inborn mechanism and we, as physicians can teach them to use it for their benefit. A tense, anxious patient is more predisposed to a stormy postoperative period. A relaxed, docile individual requires fewer narcotics and cooperates with the physician. Teaching the patient to relax is part of the practice of medicine. Many times we tell the patient, "What you need to do is to go home and relax," but, how many of us tell him, "This is what you do when you get home to relax." The hypnotic phenomenon is a doctor-patient relationship on a scientific level. I dare say that each of you has used hypnosis in your practice. You use it every day on an unconscious level. Your patients fixate on you when they come into the office; you are the authority, and their attention is

focused on you. Many times they are unaware of their own body feelings, and in that state of fixation, you can teach them many of the hypnotic phenomena.

A Controversial Subject

DR. TOWLER: The phenomenon of hypnosis has, certainly, long been recognized. Nevertheless, for a great many reasons, the place of hypnosis in the practice of medicine has continued to be controversial. As I see it, the main reasons for this controversy concern the fact that hypnosis has been utilized by charlatans in a dramatic manner, in an atmosphere not in keeping with medical tradition. Unfortunately, such use still exists today: in an atmosphere of witchcraft, voodooism, or other circumstances not considered respectable or professional.

In June of last year the House of Delegates of the American Medical Association approved some findings of the American Medical Association Committee on Mental Health. One is that "General practitioners, medical specialists and dentists might find hypnosis valuable as a therapeutic adjunct within the specific field of their professional competence."

Since approval of that report by the Delegates, a paroxysm of interest in hypnosis has occurred throughout this country. There has been what impresses me as a national epidemic of "quickie" courses. Most physicians have been literally deluged with invitations to attend and participate. These courses, advertised by people who call themselves licensed hypnotherapists, psychologists, and other grossly misleading terms, have included such special offers as the Kentucky Derby Special Course in Hypnosis, which cost included two reserved seats to the races and two mint juleps!

In spite of the fact that hypnosis is a well validated phenomenon, many questions need to be answered before the method is generally accepted and utilized by the medical profession or by patients.

First, what can the medical profession do to stop some of the charlatans who advertise and peddle these short courses in the way they do? I am not sure of the answer, but one thing is apparent: physicians need not attend these courses. If they recognize the character of the people who conduct such courses, they can be influential simply by not attending and, consequently, cutting off the income.

Who should teach hypnosis? The Committee on Mental Health of the American Medical Association and the Association's Subcommittee on Hypnosis are still formulating answers and policies. They have expressed the opinion that teaching of this type should be restricted to medical schools and courses conducted and sponsored by recognized medical societies, such as this Academy.

What has been done in research, and what must be done before the value and limitations of hypnosis as a diagnostic and therapeutic aid is established? A well organized, well designed, and well controlled program of research should be conducted not in a psychologic laboratory, but in a medical center, where hypnosis can be compared with other currently used techniques to determine its relative value.

If a minor surgical condition requires only a short period of anesthesia, is hypnosis as good, safer, or better than administration of Pentothal or some of the other commonly used anesthetic techniques? With a large series it should be possible to make comparisons in terms of possible complications. It seems to me that experimental animals could be used as in other basic medical research.

Need for Adequate Training

How much training does a physician need before he is considered a competent hypnotherapist or hypnologist? Suppose, for example, that a physician has attended one of the fly-by-night short courses I mentioned. He learns the procedure for induction of hypnosis, which is simple. He uses it in the practice of medicine and his patient, while in a hypnotic state, has a physical complication. If the patient is vindictive and litigious, the question would arise, "Was this physician utilizing all of the procedures in the care and treatment of this patient with this condition that the average prudent physician would have been utilizing at the same time and under same or similar circumstances?" I am not sure how that question would be answered by a jury or judge.

A question pertinent to this audience and to other physicians in Texas is that of referral by the physician of a patient to a psychologist for hypnosis and for therapy under hypnosis. It is a violation of medical ethics of the Texas Medical Association and an outright violation of the Medical Practice Act to refer a patient to a nonlicensed practitioner for treatment. Physicians participating in that sort of practice jeopardize their positions as members of the state medical association, as well as their licenses to practice medicine.

DR. ERICKSON: In 1945, the American Psychiatric Association recommended that courses in hypnosis be given in medical schools. They commented favorably upon the course that I was teaching at Wayne University College of Medicine, and recommended that similar courses be given elsewhere. Since I left Detroit, there has been no further teaching of hypnosis at Wayne University, for the simple reason that nobody was interested in teaching it. Where can such teachers be found in the United States at present?

Dr. Towler mentioned that, but I think he overlooked one particular thing: it isn't only in the United States that there is an interest in hypnosis; interest is worldwide. One society in Argentina, for example, has 700 members, every one a physician, a dentist, or a doctor of philosophy in psychology. Instruction in hypnosis, I think, should be given in medical schools. Nevertheless, the psychology laboratory should be utilized, and the physiology laboratory, also. Every possible approach to hypnosis should be used. Hypnosis, as an adjunct to medicine should not be turned over to workers in any other field than that of the healing arts. The dentist and the physician can handle it adequately. Psychologists working in the psychology laboratory can contribute significantly, but I am not in favor of their treating patients, except under direct medical supervision.

I know of one charlatan who offers to give courses in Galveston, Dallas, and Wichita and I don't know where else. He'll charge $330 for 18 hours of his teachings, and boasts that he is the world's fastest hynotist. I wonder what you would think of a surgeon who boasted that he was the world's fastest surgeon. Hypnosis should be used for the patient's benefit, not to enhance the physician's reputation as a fast worker. This charlatan also boasts that every prominent physician in the United States calls him in consultation, though he hasn't even had a college education. Anyone who wants instruction in hypnosis should scrutinize the professional reputation of the person who offers to give it. Certainly, nobody who lacks a professional degree should be regarded as competent.

Is the three-day course long enough? A three-day course affords a basic understanding of techniques. The physician is expected to have knowledge of his profession. After he learns the technique of inducing a trance, he should practice it on the patient who doesn't represent a serious problem. He should develop his skill with other patients, then, repeat that 3-day course to discover more ways of applying it.

I think that all of these courses should be sponsored by medical and dental societies, and medical and dental schools. Yet, the question arises in some parts of the country where there is no instruction of any sort: "Where can somebody be obtained to start that course and arouse the interest of physicians." At present, the Academy of General Practice is doing a great deal to sponsor such courses.

DR. OTTO: Dr. Towler, has hypnosis been of value in treatment of patients with neurologic lesions of Parkinsonism or cerebral palsy?

DR. TOWLER: No, I don't think so. Patients with these illnesses are more effectively treated with currently used medication. I assume this question is directed toward the physical manifestations of basal ganglia disease and cerebral palsy, not the emotional components. My answer is based on physical manifestations.

DR. FATTER: I wonder if one treats the disease and forgets about the patient. If by some technique the patient could be oriented, the disease will not be cured, but he might learn how to live with it.

DR. OTTO: Dr. Fatter, would you elaborate on the use of hypnosis by the physician in general practice?

DR. FATTER: As I practice hypnosis, I consider that the patient is treated as an individual functioning in his environment with feelings, likes, and dislikes. I don't think that it is necessary to deliver a patient or to perform an operation without anesthesia or analgesia. To me, that glorifies the physician rather than supplies the patient's need. However, patients are prepared physically for operation, but how about emotionally?

How can a patient be prepared to endure the task at hand? I mentioned before that in a trance the savage's threshold to pain is raised, his fear of battle is decreased, and his threshold of endurance is raised. This same objective can be accomplished in patients as a primary gain. Many times, it is surprising how much anesthesia patients will spontaneously and automatically develop. A mother kisses her child's wound and the child feels better. A patient states, "When Dr. Brown walked in to the room, I felt better." She did feel better; she let herself feel better.

Patients fixate on us, as doctors; they are intent when they come into our offices. They sit down and we are, to them, as a parent is to a child. Our hands are soothing; our presence, to them, is comforting. That is the art of medicine.

The physician has become so scientific in the past 15 years that he overlooks the fact that the sharpest therapeutic tool in his possession is his personality. He should learn how to use it on a scientific basis for the benefit of his patients.

DR. OTTO: Dr. Towler, do you believe that the present wave of interest in hypnosis is an emotional epidemic?

DR. TOWLER: I think that the amount of real basic research which is organized and conducted by the medical profession will influence the duration of this interest and, ultimately, the place that hypnosis has in the practice of medicine.

DR. OTTO: There has been some comment that hypnosis and suggestion are synonymous. What do you think, Dr. Erickson?

DR. ERICKSON: I don't know how to answer that question. In hypnosis, you secure the patient's attention and offer him ideas to act upon. As he incorporates them into his thinking, he progressively enters a trance. When that state begins and ends, however, you really don't know.

I agree with Dr. Towler as to the importance of scientific research. To bring hypnosis to scientific maturity, there should be extensive laboratory study

of the phenomenon. At present there is an emotional epidemic so far as the tremendous interest in hypnosis is concerned. As hypnosis is put on a scientific basis, it will survive. In the past interest has waxed and waned because hypnosis depended upon one man or one clinic to teach it; now, there are teaching centers all over the world.

Hypnosis and Psychoanalysis

DR. OTTO: Dr. Erickson, can the time for formal psychoanalysis be materially shortened by use of hypnosis?

DR. ERICKSON: In 1889, Freud stated: "Eventually, free association methods will be replaced by hypnosis." In 1910, and again in 1923, he repeated that statement; unfortunately, I can't cite the exact references. Yes, hypnosis can shorten the length of psychoanalysis tremendously, and that's one of the interests of modern psychoanalysts.

DR. OTTO: Dr. Erickson, how successful is hypnosis in symptom removal in conditions with a strong psychologic component, without delving deeply into psychologic aspects of the cause?

DR. ERICKSON: It depends upon the symptom. The patient who overeats for deep seated psychologic reasons has two problems: the deep seated psychologic reason and the obesity. If half of his problem is corrected, he may be able to cope with the other. In all of my experiences since 1923, I haven't found any adverse effects from symptom removal. I have done experimental as well as clinical work on that subject.

DR. OTTO: Is a hypnotic trance likely to activate latent psychosis?

DR. ERICKSON: As Dr. Fatter mentioned, hypnosis is the development of a physician-patient relationship. Certainly, the near-psychotic patient, the patient who is likely to commit suicide, needs somebody with whom he has a good interpersonal relationship. Hypnosis does more to prevent suicide than to cause it: it does more to prevent the outbreak of a psychosis than to cause one. In fact, as a psychiatrist, I strongly recommend the use of hypnosis in such circumstances to build up a good, strong, safe and secure interpersonal relationship.

DR. TOWLER: I certainly endorse what Dr. Fatter and Dr. Erickson have said with regard to the importance of a good doctor-patient relationship. I believe, however, that a wholesome, effective doctor-patient relationship can be established without the conscious, deliberate use of hypnosis; there may be some unconscious participation on the physician's part. Dr. Erickson said that he would use hypnosis for a patient potentially suicidal or depressed. As I understood, he used it to facilitate development of a workable relationship; perhaps he would use hypnosis therapeutically. I would not; I would use the so-called somatic approaches which I believe would be more effective under the circumstances.

DR. OTTO: Dr. Erickson, would you use hypnosis as the sole treatment for a depressive illness?

DR. ERICKSON: I certainly would not. One ought to know every possible approach to illness. If you can't know them at all, have as wide a variety of approaches as possible. Certainly, for some patients I wouldn't use hypnosis under any circumstances; for others, it would be the method of choice. It is a matter of clinical judgment always. Psychiatrists should be able to use hypnosis, the somatic approach, the analytic approach, the Meyerian approach.

◗ Dr. Otto, Titus Harris Clinic, John Sealy Hospital, Galveston.

If You Itch, It Might Be Mites

Mites may be flooding your bedroom at night, an article in the August issue of *GP,* journal of the American Academy of General Practice, declares.

Avian mites which live on feathered animals are difficult to see—they are less than one-fiftieth of an inch long—and they enter the air conditioner easily because their favorite feathered friends—birds—find the cooling machinery such a convenient place to nest.

Homeowners are advised to screen air intake on air conditioners and the warm, dry ledges below the units to stop the birds from nesting. In addition, window ledges should be painted with commercial preparations especially designed to discourage the mites.

Of the 12,000 patients returned to communities from state mental hospitals during the last fiscal year, an estimated 4,000 will return to institutions. Patients are reluctant to leave the hospital for fear of the reception they will receive at home. As they suspect, members of the community continue to have superstitions and unrealistic fears concerning mental illness.

POST-HOSPITAL CARE OF MENTAL PATIENTS

C. J. RUILMANN, M.D.
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STATE MENTAL hospitals are complicated and ponderous institutions. It would be foolish to say that a revolution in the real sense of change has been or could be brought about in the over-all state mental hospital picture. A noteworthy evolution during a period of about 10 years, however, has produced some real changes in the amount and kind of work required of a state mental hospital. Although these changes have solved some problems, they have, as physicians might expect, created some new problems.

In Texas, and in a good many other states, the average population of state mental hospitals has been shrinking slowly. In Texas, for example, at the end of the last fiscal year there was approximately a 2 per cent decrease in hospital population, compared to the beginning. The real significance is not in the decrease, but rather that the decrease should have occurred in the presence of a rapidly rising number of admissions with each successive year. The reasons for an increase in admissions several times as great as the population increase are not clearly understood, and need considerable exploration. This discussion will not be concerned with the reasons, but will recognize the existence of the fact.

A fiscal year is a convenient frame of reference for evaluating experience. During the last fiscal year, state mental hospitals in Texas returned 12,603 living citizens of the state to their communities. Most of these were active adults in the young to middle age brackets. Patients 65 years and older, who comprise about one-fifth of all admissions, constitute only one-fifteenth or less of discharges, and many of these enter private nursing homes or other kinds of care arrangements. Responsibility for 12,000 individuals who have attained a state of reasonably good health and who must be integrated in the communities from which they came, naturally, gives cause for concern.

It may be possible to draw comfort from data which indicate that 2 of every 3 patients who are returned to their homes will not be readmitted to the hospital. Nevertheless, no state in the nation has evaluated realistically the quality of adjustment made by patients who do not return to the hospital. Of the 12,000 patients who were returned home during the last fiscal year, approximately 4,000 can be expected to return to the hospital. Since these patients were, at time of discharge, in reasonably good condition, the reason for the relatively large number of readmissions might be questioned. A decade ago it was not a matter of great consequence, since the total number of annual admissions was considerably less than the present annual number of readmissions.

A state mental hospital, whatever its shortcomings, is in many ways a special kind of place. In addition

to the direct medical facilities and activities offered in such an institution, and in spite of it being overcrowded, having lack of privacy, and other less desirable characteristics, the hospital setting becomes for most patients a place of safety and security. During the early phases of hospitalization this is, of course, a therapeutic advantage. As the time approaches for the patient to attempt a somewhat more complex adjustment required in the community, however, his overdependence on the protective aspects of the hospital become a real factor, not only in his discharge, but in his ability to remain well outside the institution.

RELUCTANCE TO LEAVE HOSPITAL

It may seem strange that patients often are reluctant to leave state mental hospitals, but this is the case. Moreover, the idea is not surprising in view of the great anxiety experienced by most persons when it is necessary to contemplate any aspect of mental illness. This is not to imply that the many efforts to educate the public away from traditional superstitions and misconceptions about mental illness have been fruitless, but only that much more is necessary if the state hospitals' readmission rate is to be reduced to those in whom relapse is unavoidable.

Dr. C. J. Ruilmann of Austin, who is director of Mental Health and Hospitals for the Board of Texas State Hospitals and Special Schools, presented this paper before the Conference of City and County Health Officers at the Texas Medical Association's Annual Session, April 12, 1960, in Fort Worth.

The follow-up care of a patient discharged from a state mental hospital has medical and nonmedical aspects. Providing for one without the other tends to be fruitless. Hospital medical staffs are properly reluctant to discharge a patient who has taken a significant amount of medication unless there is some assurance that the family physician or another medical practitioner in the patient's community will follow his progress and take a personal interest in his well being. Doubts about the matter of follow-up frequently result in needed medication being discontinued when the patient leaves the hospital or reduced to an amount deemed safe rather than in keeping with his requirements.

Patients, on leaving the hospital, generally experience considerable doubt and misgivings as to the reception they will receive at home. They remember all too well the unpleasant interlude which for most of them immediately preceded hospitalization. Almost all patients who recover to the extent of being considered for discharge or furlough are sharply aware that friends, neighbors, and even family members are likely to be ill at ease and anxious. Although a patient, even on leaving the hospital, may have an incomplete knowledge of the dynamics of his illness, he is almost certain to be aware of problems related to the difficulties in interpersonal relationships which are a part of his illness. Many patients are more realistic and more tolerant in these matters than members of their families and friends and neighbors.

RETURN TO COMMUNITY

From the events reported by readmitted patients and by relatives of such patients, the person who has recently returned to his community from a mental hospital apparently is expected to perform better than the rest of the people in the community. He also is required to behave within narrower limits of tolerance than his fellow citizens. Smaller deviations in his behavior are regarded with more apprehension and are studied more closely than is true of deviant behavior on the part of others. It is interesting, but disheartening, to note the retrospective re-evaluation of behavior when a community member suddenly learns that someone has recently been a patient in a mental hospital.

Although these matters are difficult to quantitate, it is impossible to deny the existence of some of the attitudes just discussed. As far as the patient's ability to remain well is concerned, they usually are crucial factors. Even the basic necessity of earning a livelihood is surrounded by difficulties emanating from superstitions and unrealistic fears, which often deny a former patient even a chance to earn a living. Some of these factors may not be primarily medical, but they are part of the community climate, and, therefore amenable at least in some degree, by the medical segment of the community.

The readmission rate to state mental hospitals could be cut by half, I believe, if the elemental things of which we all have been aware for a long time were applied. The follow-up care of patients has been neglected more than most of the other aspects of state mental hospital operation until recently, even though this area offers a rich potential for promoting good health of the people and for diminishing the astronomical case load of these large institutions.

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Recognition and Treatment of Shock In Acute Myocardial Infarction

The author has studied 22 cases of shock occurring in the course of acute myocardial infarction. The mortality rate in this series was 45 per cent. The use of vasoconstrictor substances definitely has lowered the mortality rate when compared with previous series treated by other means.

HOWARD E. HEYER, M.D.,
Dallas, Texas

THE DEVELOPMENT of shock in acute myocardial infarction is a grave complication associated with a high mortality rate. The rate of occurrence of severe shock in this condition has been variously estimated at from 7 to 20 per cent.[8, 13, 14, 25, 27, 30]

The frequency with which the diagnosis is made in various series of patients appears related to the severity of diagnostic criteria employed. When patients are untreated, the mortality rate in severe cardiogenic shock has been reported to range from 70 per cent to as high as 93 per cent.[8, 13, 14, 25, 27, 30] Immediate treatment may reduce the death rate considerably.[2-4, 11, 15, 16, 18, 20, 22-24, 26, 28, 31]

Moderate hypotension often occurs in myocardial infarction and should not be confused with true clinical shock. The latter is now generally diagnosed when the pressure falls to approximately 80 mm. of mercury systolic, with clinical signs of shock, such as sweating, pallor, tachycardia, weakness, and dulled sensorium. When this clinical picture is present, the patient is in a grave and precarious condition and the outlook is poor without treatment. The present article relates the author's experience in 22 cases of shock, and point out the means of therapy which appear most helpful in this condition. Observations of the general course of the blood pressure in a series of cases of acute myocardial infarction without shock also were made.

CRITERIA AND MATERIAL

The diagnosis of acute myocardial infarction was made on the basis of a characteristic clinical history with associated electrocardiographic changes and confirmatory laboratory evidence, such as transitory elevation in the transaminase level. In addition, autopsy confirmation was obtained in 5 of the 10 patients who died with cardiogenic shock. In the present study 197 cases of acute myocardial infarction were surveyed.

Shock was diagnosed under the following conditions: (1) decrease in blood pressure to levels of 80 mm. systolic or below and (2) clinical signs of shock. Patients in whom severe hypotension was attributable primarily to other causes, such as severe tachycardia or pulmonary embolism, were not included. Twenty-two cases which met these criteria were included.

Because of the grave prognostic implications of this syndrome, vasoconstrictor therapy was started almost immediately if shock did not yield promptly to administration of analgesics and oxygen. In many cases therapy was instituted within a half hour. In 16 patients, levarterenol (Levophed) alone was employed; in 2 patients metaraminol (Aramine) alone was used. Two patients received both levarterenol and metaraminol, and 2 patients received both levarterenol and mephentermine sulfate (Wyamine). The promptness of therapy was considered to be of particular importance in improving the outlook for survival.

In some instances, a pressor effect with elevation in blood pressure was obtained, even though the patient later succumbed. A satisfactory response to treatment was considered present when blood pressure was elevated to a level of 100 mm. or above, with relief of symptoms and signs of shock. The term survival was used to designate all patients who survived the acute episode and left the hospital.

RESULTS

In the present series of 197 cases, shock occurred in 22 instances. Thus, the incidence of shock was approximately 11.1 per cent.

The over-all mortality rate in previous series of patients treated with levarterenol (table 1) was approximately 60 per cent.[2-4, 11, 15, 16, 18-20, 22-24, 26, 28, 31] In the present series of 22 cases, 12 patients survived and 10 patients succumbed to the episode of shock (table 2). This yielded a mortality rate of 45 per cent, which is less than that generally recorded in the literature. It is comparable to that of Sampson and Zipser,[28] who reported a mortality rate of 47 per cent.

Some of these patients had congestive failure at some time during hospitalization, but those in whom congestive failure was the primary manifestation causing hypotension were not included in the group. Those in whom congestive failure developed with shock appeared to have a poorer prognosis since 8 of the 10 patients who died had significant evidence of congestive failure. Previous myocardial infarction did not appear to influence the outcome since a significant number of survivors had had previous episodes of this type.

The duration of shock before therapy appeared to influence the outcome. Thus, in 3 patients, vasoconstrictor therapy was delayed 2 or more hours after the onset of shock, and all of these patients died. In the group that survived, the longest duration of shock before therapy was 1½ hours, and in most instances it was less than 1 hour.

Among patients with acute myocardial infarction who did not have shock, blood pressure did not decrease to 80 mm. or below at any time during hospitalization. Many patients had systolic levels between 90 mm. and 100 mm. some time, but these periods of hypotension were not associated with clinical signs of shock or circulatory failure. All of the patients with acute myocardial infarction without shock had a decrease in blood pressure at some time during hospitalization.

CASE HISTORY

A 55 year old white female had chest pain beginning approximately 12 hours before admission to the hospital. This was mild at first, but increased in severity during the 2 hours before admission. She had had a previous episode of acute myocardial infarction at the age of 45, but had made an uneventful recovery.

On admission, the patient was pale, perspiring, and in considerable distress. Blood pressure (figure 1) was 76/50, with pulse rate of 48 per minute, with a regular rhythm. The lungs were clear without rales. The use of oxygen per mask, and Demerol 100 mgm. by injection, was followed by prompt disappearance of pain and cessation of sweating.

TABLE 1.—*Myocardial Infarction With Shock—Results of Levarterenol Therapy.*

Author	Year	Patients	Shock Relieved	Survivors	Deaths
Kaindl and Lindner[15]	1950	1	1 (100%)	1 (100%)	0
Liljedahl and Norlander[18]	1951	1	1 (100%)	1 (100%)	0
Birke[3]	1952	3	3 (100%)	2 (67%)	1 (33%)
Miller and Baker[22]	1952	7	1 (14%)	1 (14%)	6 (86%)
Kurland and Malach[16]	1952	14	9 (64%)	4 (29%)	10 (71%)
Livesay and Chapman[20]	1953	6	1 (17%)	1 (17%)	5 (83%)
Miller and Others[24]	1953	9	5 (56%)	5 (56%)	4 (44%)
Gazes and Others[11]	1953	7	7 (100%)	6 (86%)	1 (14%)
Smith and Guz[31]	1953	6	4 (67%)	4 (67%)	2 (33%)
Moyer and Others[26]	1953	14	6 (43%)	6 (43%)	8 (57%)
Calenda and Others[4]	1953	13	4 (31%)	2 (15%)	11 (85%)
Sampson and Zipser[28]	1954	30	20 (67%)	16 (53%)	14 (47%)
Binder and Others[9]	1955	25	12 (48%)	8 (32%)	17 (68%)
Littler and McKendrick[19]	1957	22		0	22 (100%)
Miller and Moser[23]	1959	55	38 (70%)	22 (40%)	33 (60%)
Total		213	112 (53%)	79 (37%)	134 (63%)

The pressure returned to 102/74 mm. within approximately 15 minutes, and an hour after admission was 110/76 mm.

An electrocardiogram made on admission showed sharp elevation of the ST segments in leads II, III, and AVF. During the course of hospitalization, this tracing went through serial changes typical of an acute posterior myocardial infarction, with a Q-3, T-3 pattern evolving, confirmed by similar findings in AVF. Normal sinus rhythm was present.

On the third hospital day (figure 1), approximately 57 hours after the onset of chest pain, clinical signs of shock

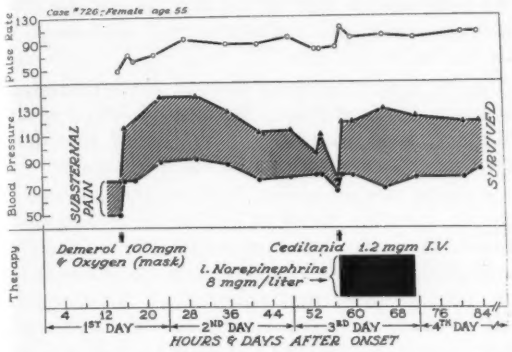

Fig. 1. Acute myocardial infarction. Shock was present on admission, but yielded promptly to administration of analgesic and oxygen. On the third hospital day, shock recurred, necessitating administration of l-norepinephrine; patient survived.

developed, and blood pressure fell from 110/80 to 76/64 mm. It remained at this level for 30 minutes, and did not respond to the use of oxygen by inhalation. No chest pain was present. Levarterenol therapy was begun, 8 mg. in 1,000 cc. of 5 per cent glucose in distilled water by intravenous drip method. Blood pressure promptly returned to normal, and within 5 minutes had reached a level of 120/80, with pulse rate of 112 per minute. The levarterenol solution was given for approximately 14 hours, then gradually was discontinued. During this time normal blood pressure levels were maintained. Subsequent convalescence was uneventful. The patient left the hospital in good condition.

Comment.—The above case illustrates 2 points: (1) that shock may occur with the onset of chest pain and may yield to the prompt administration of analgesics and oxygen; (2) if shock is not corrected promptly with these measures, as happened with the second episode on the third hospital day, vasoconstrictor substances must be given within a reasonable period to avoid irreversible circulatory failure.

TREATMENT

On the basis of the present study, it appears that cardiogenic shock is a medical emergency of the gravest magnitude. Treatment should be instituted without significant delay. A few patients may respond quickly to administration of analgesics, oxygen, and other symptomatic measures. If this relief

TABLE 2.—*Results of Vasopressor Therapy in 22 Cases With Shock After Myocardial Infarction.*

Total Cases	Pressor Effect	Survivors	Deaths
22	20	12 (55%)	10 (45%)

is not secured within a few minutes and if the patient shows signs of deepening shock, vasoconstrictor substances should be employed at once. From previous reports, use of transfusions and intravenous fluids, including plasma, does not appear to have decreased the mortality rate from shock when employed alone.

Although 1 patient in the present series was successfully treated with metaraminol, hypotension was not successfully controlled by this substance in 3 others. Apparently the vasoconstrictor of choice is levarterenol. If shock does not yield promptly to administration of metaraminol, no delay should be permitted before levarterenol is used.

Delay appears important in influencing the outcome when shock develops in patients with myocardial infarction. With this point in mind, blood pressure and heart rate are routinely determined at hourly or 2 hourly intervals for the first 96 hours of hospitalization. Although this may occasionally be annoying, most patients tolerate it fairly well, since they are given analgesics and sedatives for rest. Development of shock may thus be recognized promptly and treatment quickly instituted. Moderate hypotension occurs without shock in many cases of acute myocardial infarction.[6, 21] *Per se* it may not warrant treatment, but all patients with hypotension should be observed carefully to permit early recognition of true shock.

Many patients with severe shock will have evidence of congestive failure within a variable period after the onset of cardiogenic shock. Digitalis should be administered. Intravenous administration of Cedilanid was usually employed in the present series. Likewise, treatment for arrhythmias should be instituted promptly, since heart block will cause a significant deterioration in the patient's condition, as will auricular or ventricular arrhythmias with tachycardia.

Levarterenol is given intravenously in a concentration of 8 mg. per 1,000 cc. of 5 per cent glucose in distilled water. If necessary to maintain adequate blood pressure levels, an amount as much as 32 mg. of levarterenol per liter may be given. The rate of administration is governed by the level of blood pressure, and may vary from 6 to as much as 40 or more drops per minute. In general it is preferable to keep the blood pressure level at about 100 mm. systolic or above. Severe elevations in pressure should be avoided since they increase cardiac work in the presence of a damaged myocardium.

If shock is severe, the use of a polyethylene catheter passed into the arm veins is probably the best means of administration. Small veins of the hand and foot should not be used since phlebitis may develop.

Extravasation of levarterenol may develop occasionally, and sloughing may be prevented by prompt injection of phentolamine (Regitine) into the area of extravasation. It is wise to continue a slow infusion of fluid even after normal blood pressure is maintained without use of vasoconstrictor substances. Occasionally, such patients relapse into shock, and it is advantageous to have a route of administration immediately available for employment of vasoconstrictor substances.

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DISCUSSION

It is evident from the mortality rate in the present study (45 per cent), as well as from a review of the work of other investigators, that prompt administration of vasoconstrictor substances has significantly lowered the death rate in cardiogenic shock.[2-4, 11, 15, 16, 18, 20, 22-24, 26, 28, 31]

Previously reported mortality rates of approximately 70 to above 90 per cent[8, 13, 14, 25, 27, 30] definitely have been decreased by use of these substances. Moreover, in the present series, if patients whose treatment was delayed more than 3 hours are eliminated, the mortality rate is reduced even further.

Most hemodynamic studies performed in patients with acute myocardial infarction and shock indicate a pronounced decrease in cardiac output.[9, 10, 12, 17, 32] The venous pressure shows mild to moderate degrees of elevation, and peripheral resistance has been generally, though not invariably, increased. The lack of elevation in peripheral resistance in some patients has been pointed out by Agress and Binder,[1] and may be attributable to failure of a homeostatic vasoconstrictor response.

Apparently the time that elapses before treatment is of considerable importance in determining whether or not patients with shock will survive. Thus, Sampson and Zipser in a group of 30 patients with shock after myocardial infarction treated with levarterenol, reported an immediate survival rate of 67 per cent, and an over-all survival rate of 53 per cent. In the patients who survived, duration of shock was 1.8 hours, whereas those who died had an average duration of shock before treatment of 4.0 hours. Miller and Moser reported that only 3 of 10 patients in whom shock after myocardial infarction was present for over 4 hours survived, whereas 10 of 17 patients treated for shock of less than 1 hour's duration survived. Griffith and his co-workers noted, in treating patients with shock in myocardial infarction (by vasopressor substances and additional means), that 60 patients treated within 3 hours of onset had a mortality rate of only 13 per cent. In contrast, 74 patients treated after a 3 hour interval had a mortality rate of 76 per cent.

In the present series, all patients whose treatment was delayed more than 3 hours died. There were, however, some patients who succumbed to shock even though treatment was instituted promptly.

Probably survival is dependent, in addition to other factors, upon the degree of myocardial damage sustained. Thus, the careful experiments of Wiggers[33] with animals indicate that irreversible circulatory failure develops when hemorrhagic shock is prolonged for an extended period. Corday and his associates[7] have pointed out the effect of severe hypotension in decreasing coronary flow—especially collateral flow—and in reducing the contractility of heart muscle. Savranoglu and associates[29] have shown that after an hour, sustained tissue anoxia in animals seemed to produce damage of irreversible degree. In addition, Calvia and his co-workers[5] have shown that the decreased availability of myocardial oxygen, and the decrease in effective coronary flow which occurs in shock, can be reversed readily by restoration of pressures to normal with levarterenol.

It appears clear, therefore, both from clinical reports and laboratory evidence, that severe myocardial damage may be produced in cardiogenic shock, which is self-perpetuating and cyclical, and which may eventuate in irreversible damage to the circulation. For this reason, prompt treatment appears highly desirable.

SUMMARY

Twenty-two cases of shock occurred in the course of acute myocardial infarction. The mortality rate in this series was 45 per cent. Use of vasoconstrictor substances definitely reduced the mortality rate when compared with previous series of patients treated by other means.

In most instances vasoconstrictor therapy was instituted promptly after onset of shock. All patients in whom therapy was delayed significantly succumbed to the episode. Prompt recognition and treatment of shock occurring in the course of acute myocardial infarction is, therefore, of great importance.

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Additional references may be obtained from the author.

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I wish to acknowledge my indebtedness to Drs. R. A. Dathe, S. M. Katz, and P. K. Mason for their permission to include 4 of the patients reviewed in the present study.

ABSTRACT OF DISCUSSION

Dr. E. Ross Kyger, Jr., Fort Worth: Dr. Heyer has emphasized forcefully the basic importance of prompt vasoconstrictive therapy in cardiogenic shock when sedation and oxygen fail to produce a satisfactory response within a reasonably brief period. There can be no doubt that this situation constitutes a medical emergency.

Dr. Heyer aroused my curiosity to such an extent that I obtained current figures relating to cardiogenic shock in a local hospital. Although my sampling is limited, it fundamentally supports his precepts. I have arbitrarily reviewed the cases of patients with myocardial infarction admitted to the intensive nursing unit of Harris Hospital since January 1, 1960, and specifically those in whom Levophed was used for cardiogenic shock. Obviously, this selection includes a larger proportion of more seriously ill patients. Admittedly, it is not as representative a cross section of patients with infarction as Dr. Heyer's personal series.

Of 9 patients with acute infarction who met the criteria for my study, only 4 survived to leave the hospital, a recovery rate of 44 per cent. In this small group Levophed was started no longer than 30 minutes after the onset of overt shock, and was continued for periods of 4, 9, 30, and 48 hours, respectively. Of the 4 survivors, 3 had posterior infarctions, and 1 an anteroseptal infarction. None had evidence of a previous infarction.

An analysis of fatal cases also is interesting. In 1 case infusion of Levophed was started within minutes after the advent of shock, and was continued for 20 hours until death occurred. This was a case of posteroseptal infarction in a heart that had sustained a previous infarction.

In the 4 other fatal cases, Levophed administration was begun 2, 2, 5, and 24 hours, respectively, after onset of shock and was continued for 2, 20, 2, and 1 hour, respectively. The patient who died in 2 hours had a posterior infarction, with an old anterior infarction associated with ventricular aneurysm. Another patient who died in 3 hours was 82 years of age, had an extremely fibrotic heart, and sustained fresh occlusions of both the right coronary artery and circumflex branch of the left. The remaining 2 patients both had anteroseptal infarcts; treatment was started at 2 and 24 hours, respectively, after onset of shock. The former died after 20 hours of Levophed administration, and the latter after only 1 hour. In each case, aside from the location of the injury, delay in starting vasoconstrictive therapy apparently contributed materially to the fatal outcome.

I would like to qualify one of Dr. Heyer's statements; I believe that the location of injury, as well as its extent, is an important determining factor of the outcome. Although the numbers in my present series are small, it seems more favorable to have a posterior than an anteroseptal infarction. Apparently previous infarctions materially increase the risk.

There can be no doubt that the most favorable results are to be expected when vasoconstrictive therapy is begun as soon as it is evident that shock has not responded to oxygen and sedatives.

CASE REPORTS

Ruptured Plantaris Tendon

An Easily Overlooked Entity

Rupture of the plantaris tendon should be considered as a diagnostic possibility in any case in which there is sudden onset of pain in the calf after sudden exertion. Treatment is simple if the condition is recognized early; surgical correction is seldom indicated.

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THE PLANTARIS muscle is a narrow fleshy slip approximately 4 inches long, arising from the lateral supracondylar line of the femur and from the oblique popliteal ligament of the knee. Its belly crosses obliquely between the gastrocnemius and soleus muscles and ends in a long slender tendon which descends along the medial border of the tendo calcaneus, to be inserted with it into the posterior part of the calcaneus. It is a rudimentary muscle in man and serves only as an accessory to the gastrocnemius, aiding in extension of the ankle if the foot is free, or in flexion of the knee if the foot is fixed. Since it is rudimentary, it is not stressed in the teaching of anatomy. Its only possible importance is that it can produce sudden disabling pain in the leg because of rupture. The presence of the muscle is easily forgotten by those whose work does not require frequent reference to anatomy, and the condition may not be considered as a possibility in the differential diagnosis of sudden pain in the calf.

In a rupture of this muscle the usual history is that of immediate onset of pain in the calf muscle during sudden forced dorsiflexion of the ankle. This is followed by a painful limp, with increasing pain as the patient tries to walk on the heel. After 2 to 3 hours there is usually swelling of the calf of the involved leg. After 3 to 4 days, discoloration on the skin extends along the lower half of the leg, usually on the medial side. The weakest point of the muscle is its belly, and it is at this point that rupture usually occurs. Maximal tenderness is usually in the upper half of the calf. The extent and duration of symptoms depend on the size of the hematoma which develops.

Treatment is simple if the entity is recognized early. Usual procedures to minimize hematoma formation are included: elevation of the extremity and use of ice packs and elastic pressure dressings. This is followed by limited weight bearing on crutches,

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continuation of pressure, physical therapy, and administration of Varidase. Elevation of the shoe heel allows an earlier return to weight bearing. The usual healing period is approximately 3 weeks.

Case Reports

CASE 1.—A football coach, aged 31, was loading his boys on a bus after a game. He turned and suddenly sprinted toward the bus with immediate severe onset of pain in the calf of the left leg. He walked the few remaining steps to the bus with great difficulty. Approximately three hours later, at examination, he was walking on the toes of the left foot. The calf on the left side was painful and swollen. There was generalized tenderness throughout the calf muscles, but with maximal tenderness at the junction of the upper and middle third. The treatment program previously outlined was followed. Four days later the discoloration typical of this condition appeared. Convalescence was uneventful, with complete recovery at the end of 3 weeks.

CASE 2.—A basketball coach, aged 35, was attempting to demonstrate a jump shot. While he was springing on his toes, a sudden severe pain developed in the calf of the right leg. The patient was seen the next morning; he walked with great difficulty. The circumference of the right calf was 1⅜ inches larger than the corresponding level on the left leg. There was diffuse tenderness throughout the calf, but maximal tenderness in the upper half. Attempts to stretch the calf muscles resulted in great discomfort. Ice packs were eliminated, as it was believed that period of hemorrhage had past. Otherwise treatment was as outlined previously, with uneventful convalescence over a period of 3½ weeks.

CASE 3.—A track coach, aged 51, in attempting to demonstrate the proper use of a starting block for his sprinters, felt a sudden severe pain in the calf of the right leg. He considered the condition that of a charley horse, applied an analgesic pack, and continued the remainder of that day with his track team. The next morning, the leg was sorer, and he walked with great difficulty. The analgesic balm pack was replaced with one known commercially as Atomic Balm, in liberal amounts. This was covered with multiple layers of absorbent cotton and firm elastic pressure bandage. The patient was seen for the first time the second morning after injury. He was walking on crutches. In addition to massive swelling of the calf of the leg consistent with a large hematoma, there was a second degree burn over the entire leg from knee to ankle, from the Atomic Balm. The skin was so painful that the patient could not tolerate an elastic pressure dressing. For 1 week he was hospitalized with continuous elevation of the leg, treatment of burns, and Varidase therapy. This was followed by use of elastic bandages, whirlpool therapy, and crutches for 8 weeks before the patient could tolerate walking even with elevated shoe heels. This case illustrates that the condition of ruptured plantaris tendon can be more than a simple problem if neglected.

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Danger: Power Mowers

Power mowers, according to an article in Today's Health, *maim hundreds of children and adults each year, and most accidents are blamed on carelessness.*

Safety rules recommended:

Clear lawn of rocks, wire, and other debris.

Keep feet away from blades when starting motor.

Keep bystanders and pets from mowing area.

Know how to stop engine quickly.

Operate mower slowly enough to maintain control, and never leave it running unattended.

Store gasoline in an approved, tightly sealed container in a safe place.

Don't cut up and down hills. Always cut sideways.

Never attempt to remove an object from the mower until the blades have come to a standstill.

Don't refuel the engine when it is hot. It may burst into flames.

Don't use an electric mower when it is wet or raining.

When mowing over rough terrain, set the blades high to prevent them from picking up debris and hurling it like shrapnel.

The tenth recorded case in the United States of human infestation with Dipylidium caninum, a tapeworm usually found in dogs and cats, is reported. Presumably, the 3 year old child had accidentally ingested an infested flea from his pet cat, which was found to be infested with the parasite.

Case Report of Human Infestation With Dipylidium Caninum

Leroy J. Olson, Ph.D., and
Q. T. Box, M.D.
Galveston, Texas

THIS REPORT presents what appears to be the tenth recorded case in the United States of human infestation with Dipylidium caninum, a tapeworm usually found in dogs and cats. Previous reports of human cases (usually in children) were reviewed by Hutchison and others[1] in 1959, and showed the following distribution: 1 case in Minnesota, 1 in Georgia, 3 in Louisiana, 3 in Texas, and 1 in Mississippi.

This patient was a 3 year old white male from Galveston. The diagnosis of Dipylidium caninum was made after a report by the child's mother of motile objects in the stools. Examination of stool specimens showed these objects to be gravid proglottids characteristic of the parasite. The child was examined, but no significant clinical findings were noted. The mother reported that he was restless, had a poor appetite, and had difficulty in sleeping.

This parasite has been cited as cause for gastrointestinal disturbances and behavioral changes in some cases. On the basis of only one to two proglottids per day in the patient's stools, this case apparently represented infestation with a single tapeworm. The child was treated on an empty stomach with 100 mg. of quinacrine hydrochloride suspended in a sweet syrup; several hours later a purgative was given. All stools were collected for 72 hours, but no scolices were recovered. Subsequently, stools remained negative for 4 weeks, were intermittently positive for 2 weeks, and remained negative for several months, indicating elimination of the parasite.

It is difficult to evaluate the effectiveness of therapy in the elimination of this infestation because of the brief recurrence of positive stools. The period of negative stools after treatment indicates that this drug had some effect on the tapeworm, but the scolex apparently persisted during treatment, as evidenced by the brief recurrence of gravid proglottids. Later the child's pet cat was found to be infested with this parasite, as were other animals in that vicinity. Presumably, the patient had become infested by accidentally ingesting an infested flea (the intermediate host of Dipylidium caninum).

In view of the close relationship of children to their pet cats and dogs, the common occurrence of this parasite in such pets, and the high incidence of fleas on them, it is difficult to explain why infestation has not been reported more frequently in man.

REFERENCE

1. Hutchison, W. F.; Ricks, H. C.; and Wooldridge, D. W.: New Record of Human Infection with Dipylidium caninum in the United States, Am. J. Trop. Med. 8:603 (Sept.) 1959.

Leroy J. Olson, Ph.D., is a member of the Department of Microbiology at the University of Texas Medical Branch in Galveston, and his co-author, Dr. Q. T. Box, is a member of the Department of Pediatrics at the Medical Branch.

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INTUSSUSCEPTION

Caused by Duplication Cyst of Jejunum

A case of intussusception of the small intestine attributable to a duplication cyst of the jejunum is reported. Intussusception was reduced, and the tumor, along with 100 cm. of gangrenous intestinal tissue, was resected, with end to end anastomosis. The patient recovered.

DOUGLAS M. BENOLD, M.D.
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THE PURPOSE of this article is to report a case of intussusception of the jejunum in a 16 year old girl. This case is unusual because intussusception was caused by a rare tumor of the small intestine—a duplication cyst in the wall of the jejunum.

CASE REPORT

A 16 year old Latin American girl was admitted December 12, 1959, complaining of severe pain in the left lower part of the abdomen. Pain had been sudden in onset and was constant, but there were exacerbations of severe cramping pain every 5 or 10 minutes. There was nausea, but no vomiting, diarrhea, or melena. The patient had had a normal bowel movement the day before admission. She had just completed a normal menstrual cycle. There were no symptoms referrable to the urinary tract. On questioning, the mother said that the girl had had several previous similar episodes of pain since childhood—always with spontaneous recovery. She also reported that the child had been weak and listless for several months.

Dr. Douglas M. Benold is affiliated with the Georgetown Medical and Surgical Clinic, Georgetown, Texas.

At physical examination, a small, pale girl, obviously in severe pain, was lying on her left side with her knees pulled up against her abdomen. Temperature, pulse rate, and respiratory rate were normal. Blood pressure was 120/70 mm. of mercury. Positive findings were limited to the abdomen; there was tenderness in the left flank, left costovertebral angle, and lower left abdomen, with moderate rigidity. No masses or organs were palpated. Bowel sounds were normal. Rectal and vaginal examination revealed nothing abnormal.

A catheterized urine specimen was normal except for 3 to 4 white blood cells. Serologic tests for syphilis were negative. Complete blood cell count was as follows: red blood cells, 3,850,000; hemoglobin, 8.9 Gm.; white blood cells, 23,400; lymphocytes, 22; eosinophils, 1; polymorphonuclear leukocytes, 77; stab cells, 29; and segmented cells, 48.

A tentative diagnosis of enteritis or diverticulitis was made. A small enema gave no relief of pain, and the solution returned clear. The patient was given Demerol, 50 mg., and became more comfortable. She was given a clear liquid diet and Chloramphenicol, 500 mg., every 6 hours by mouth.

Approximately 5 hours after admission the patient vomited a moderate amount of clear liquid with a few flecks of bright blood. She rested fairly comfortably throughout the night after admission, but the next day the pain became

more severe again. Temperature rose to 99.6 F. There was a round, tender mass, approximately the size of a large orange, in the left midportion of the abdomen. It was movable and seemed cystic in nature. A flat plate of the abdomen showed a "normal intestinal gas pattern," and a long oval mass occupied the left side of the abdomen.

Even though no definite diagnosis was evident, the patient was thought to have a disease requiring surgical treatment. She was given 500 cc. of whole blood, and was prepared for surgery. A laparotomy was done with use of general anesthesia about 40 hours after admission. Another 500 cc. of whole blood was given during surgery. When the peritoneal cavity was entered, a jejuno-ileal intussusception was found, starting approximately 12 inches from the ligament of Treitz. The intussusception was released with considerable difficulty. A tumor 1 to 1.5 inches in diameter was found in the antimesenteric wall of the jejunum at the start of the intussusception. Approximately 4 feet of nonviable small intestine was resected and end-to-end anastomosis was done.

Pathologic Data.—The specimen was a 100 cm. length of small intestine identified as terminal jejunum and proximal ileum. A 60 cm. length of bowel was dark, with the remaining 40 cm. more lightly colored. The degree of discoloration suggested necrosis of tissue. At one end of the tissue a tumor projected into the lumen of the bowel; this zone measures 2.3 by 3.8 cm. In the center of a section from the tumor nodule was a cystic space filled with a pale, mucoid material. The entire tissue was dark red characteristic of abundant interstitial hemorrhage and suggestive of necrosis.

On microscopic examination, the section of intestinal wall away from the tumor showed hyperemia, edema, interstitial hemorrhage, and degeneration of the wall. There was autolysis of the greater part of the lining mucosa, with only small fragments remaining. Blood vessels were engorged, and the structure of the wall was distorted and indistinct from degeneration. Sections from the tumor mass showed prominent elevation of mucosa which lined the bowel wall and covered the tumor. The tumor was produced by the presence of an enteric cyst. A large central lumen suggested a lining mucosa which had been eroded by autolysis. A thin zone of submucosa remained. Surrounding the lumen were bundles of smooth muscle, in layers, identical with that found in the normal bowel wall (Fig. 2). The various sections demonstrated a large lumen, with its surrounding smooth muscle wall, and several smaller ones encircling it. This represented a zone of reduplication of the bowel wall within itself. Since it had been confined to a single location, it had produced a cyst, representing an enteric cyst. There was nothing suggestive of neoplastic proliferation.

Pathologic diagnosis was small intestine, terminal jejunum, and proximal ileum: enteric cyst with intussusception and gangrene.

Postoperative Period.—The patient had a smooth postoperative course. Wangensteen suction was constant, and fluids were administered intravenously. Chloramphenicol was given intramuscularly. After 3 days the gastric suction tube was removed and oral feedings were begun. The patient had a normal bowel movement on the fourth postoperative day. Chloramphenicol was continued until the eighth postoperative day. There were no signs of peritonitis. The patient was dismissed from the hospital in good condition on the tenth postoperative day.

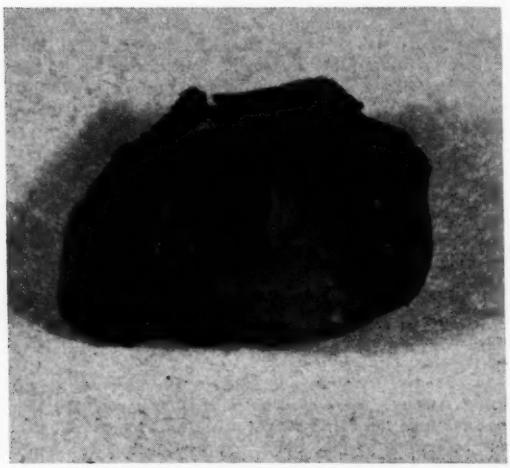

Fig. 1. Gross specimen, cross-section through duplication cyst and surrounding jejunum. Cyst is intramural in position and almost fills lumen of jejunum. Cyst could not be enucleated; resection and end to end anastomosis of involved intestine was proper procedure.

DISCUSSION

Intussusception is the invagination of a portion of intestine or colon into a more distal portion of the intestinal tract. This telescoping of the bowel may occur at different levels of the enteric tube, but the ileocolic type, in which the ileum advances into the colon, is by far the most common. Other types of intussusception are jejuno-ileal, ileoileal, and colocolic.

Intussusception is most commonly found in infancy and early childhood and constitutes an important surgical emergency. Gross,[6] in a survey of 702 cases, reported that 75 per cent of the patients were younger than 1 year of age, and 85 per cent younger than 2 years. In infants and small children, no definite cause for intussusception can usually be found;

Fig. 2. Photomicrograph, cross-section through wall of cyst. Mucosal lining of cyst and layers of smooth muscle in cyst wall can be seen.

in only 6 per cent of the 702 cases reported by Gross was an etiologic agent demonstrable. In contrast, intussusception in older children and adults is almost always secondary to pre-existing disease or tumor of the bowel wall. Ferrer[4] reported that 25 adults with intussusception were treated at the New York Presbyterian Hospital between July, 1932, and July, 1949. In 22 of these a contributory disease was present. Ferrer found the following types of tumors in the small bowel to be causative: fibroma, polyp, lipoma, leiomyoma, lymphosarcoma, and carcinoma. No duplication cysts were reported.

Eliot and Corscaden,[3] in a study of 300 cases of intussusception in adults, found that in 60 cases benign tumor, and in 40 cases malignant tumor was the underlying cause. In 1 instance a "cyst of the ileocecal valve" had produced intussusception.

Olson,[9] reviewing records of the Mayo Clinic from 1911 through 1942, found 77 tumors of the small bowel, of which 38 had caused clinical symptoms. Of these 38 tumors of the small bowel, 11 had produced intussusception. In this series only 1 symptomatic enteric cyst was found, and it did not cause intussusception.

From the references cited, it is apparent that duplication cysts of the intestine are exceedingly rare causes of intussusception. Close search of the literature shows many reports of duplications of the bowel or "enteric cysts"; however, few cases have been cited as the cause of intussusception. Gross,[6] in his series of 702 cases, reported 3 cases of intussusception caused by duplication in the terminal ileum and ileocecal area—all in infants.

Duplications of the alimentary tract have been described under various names, including "inclusion cysts," "enteric cysts," "enterogenous cysts," and "ileum duplex." Duplications may be spherical or elongated hollow structures. Their walls contain the same layers found in the intestinal tract, that is, smooth muscle and a lining of mucous membrane.

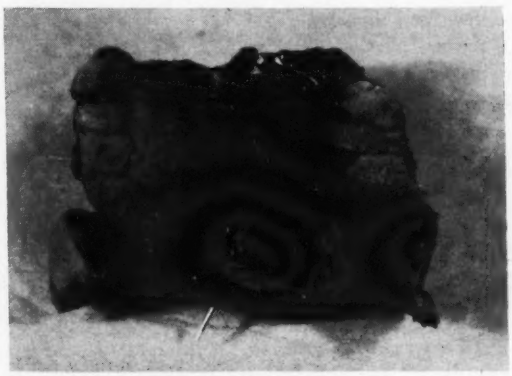

Fig. 3. Part of gross specimen, sagittal section through duplication cyst and surrounding jejunum.

They are intimately attached to some portion of the alimentary tract, most commonly in the ileum and ileocecal valve area. Duplication cysts vary in size, some being as large as a grapefruit. They are usually firmly attached to the adjacent intestine and may be intramesenteric, submucousal, or subserosal. Some are located between the walls of smooth muscle in the intestine. There is usually a common blood supply to the cyst and to the adjacent intestine, making it unwise to try to dissect the cyst free from the intestine (Fig. 1 and 3).

The exact embryologic origin of duplication cysts is not known, and several theories[1, 7] have been advanced. Probably the most plausible theory is that advanced by Bremer:[1]

> "The group of anomalies comprising the enterogenous cyst, intestinal duplications, and the like is divisible into two smaller classes on the basis of embryologic origin. Most of the spherical cysts are derived from true diverticula, which are frequently found projecting from the ventral or antimesenteric surface of the enteric tube in embryos of the 8th or 9th week and are normally absorbed later. Abnormally they continue to grow. If restricted by the intestinal muscle, they bulge within the lumen (as in this case), but if they pierce the muscle layers, outward expansion is not limited and they may become large cysts attached to the intestine.
>
> "A few of the spherical and most of the tubular structures represent true duplication, originating by an abnormal persistence of the vacuoles normally present among the massed cells of the 'solid stage' of the intestine, a phenomenon of growth in the embryos of the 6th or 7th week. By the confluence of a chain of vacuoles a new channel is formed, parallel to the original lumen."

Duplication cysts may cause various symptoms, depending upon their size and location. About two-thirds of symptom-producing intra-abdominal cysts cause intestinal obstruction.[2] They may obstruct the lumen and cause vomiting or colicky pain, or may be the point of origin of an intussusception. Pain may also be produced by pressure within the cyst from fluid secreted within the lumen. The cyst may obstruct mesenteric blood vessels and produce necrosis, sloughing, and bleeding in the adjacent intestine. The most important diagnostic sign of a duplication cyst is a palpable mass of unexplained origin in the abdomen.

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12. Sieber, W. K.: Alimentary Tract Duplications, A.M.A. Arch. Surg. 73:383-392 (Sept.) 1956.

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Americans Participate in Dangerous Sports

Millions of Americans participate in sports involving some element of danger.

Statisticians at Metropolitan Life Insurance Company believe that the *"incidence and severity of injuries sustained in competitive sports can be decreased by players having proper equipment and facilities, good instruction and supervision . . . adequate health examinations of athletes, and prompt medical attention to injuries."*

From 1955 through 1959, football accounted for 108 deaths in the United States; 81 of them the result of injuries in activities directly associated with the game. Tackling and blocking were responsible for more than one fourth of fatalities, and 27 deaths were indirectly attributable to heat stroke, heart failure, and other conditions.

Fatal injury in baseball is relatively uncommon. Major leagues have not had a fatal injury since 1920, and amateur leagues have had few fatal injuries.

Twelve amateur and six professional fighters lost their lives from 1955 through 1959. Five lives were lost by amateurs in 1959 alone.

No overall figures are available on injuries or deaths connected with basketball, skiing, and ice hockey.

In all, information indicates that injuries resulting in temporary disability are common in organized competitive sports and that the annual toll includes many severely injured and not a few deaths.

MEDICAL NEWS

★ Coming Meetings

Texas Medical Association, Austin, Sept. 17-18, 1960, Jan. 28, 1961; Galveston, April 23-25, 1961. Dr. May Owen, Fort Worth, Pres.; Mr. C. Lincoln Williston, 1801 North Lamar Blvd., Austin, Exec. Secy.

American Medical Association, Washington, D. C., Nov. 28-Dec. 1, 1960. Dr. E. Vincent Askey, Los Angeles, Pres.; Dr. F. J. L. Blasingame, 535 North Dearborn, Chicago 10, Exec. Vice-Pres.

Current Meetings

SEPTEMBER

American Association of Obstetricians and Gynecologists, Hot Springs, Va., Sept. 8-10, 1960. Dr. Robert A. Ross, Chapel Hill, N. C., Pres.; Dr. Clyde L. Randall, 216 Summer St., Buffalo 22, Secy.

American College of Radiology, Atlantic City, Sept. 30-Oct. 1, 1960. Dr. Earl E. Barth, Chicago, Pres.; Mr. W. C. Stronach, 20 N. Wacker Dr., Chicago 6, Executive Director.

American Society of Clinical Pathologists, Chicago, Sept. 24-Oct. 2, 1960. Dr. John J. Clemmer, Albany, Pres.; Mr. Claude E. Wells, 445 Lake Shore Drive, Chicago 11, Executive Secy.

Association of American Physicians and Surgeons, St. Louis, Sept. 29-Oct. 1, 1960. Dr. Louis Wegryn, Elizabeth, N. J., Pres.; Mr. Harry E. Northam, 185 N. Wabash Ave., Chicago 1, Executive Director.

Tri-State Medical Assembly, Louisiana, Sept. 14-15, 1960. Dr. R. B. Langford, Shreveport, Pres.; Dr. J. W. Wilson, Jr., 940 Margaret Place, Shreveport, Secy.

Texas Division, American Cancer Society, Austin, Sept. 14, 1960. Dr. David A. Todd, San Antonio, Pres.; Mr. Curt W. Reimann, 5014 Bull Creek Rd., Austin 3, Executive Director.

Texas Heart Association, Dallas, Sept. 9-10, 1960. Dr. Robert E. Leslie, El Campo, Pres.; Mr. Ernest T. Guy, 404 Jesse H. Jones Library Building, Houston 25, Executive Director.

Texas Pediatric Society, Sept. 30-Oct. 1, 1960, Dallas. Dr. Byron York, Houston, Pres.; Dr. C. E. Gilmore, 811 Bonham, Paris, Secy.

Tenth District Society, Beaumont, Sept. 7, 1960. Dr. Bedford Mace, Beaumont, Pres.; Dr. Irving M. Richman, 3280 Fannin St., Beaumont, Secy.

OCTOBER

American Academy of Pediatrics, Chicago, Oct. 17-20, 1960. Dr. William W. Belford, San Diego, Calif., Pres.; Dr. E. H. Christopherson, 1801 Hinman Ave., Evanston, Ill., Executive Director.

American Academy of Ophthalmology and Otolaryngology, Chicago, Oct. 9-14, 1960. Dr. John H. Dunnington, New York, Pres.; Dr. W. L. Benedict, 15 Second St. S.W., Rochester, Minn., Secy.

American Cancer Society, New York, Oct. 26-27, 1960. Dr. Warren H. Cole, Chicago, Pres.; Mr. Granville Whittlesey, 521 West 57th St., New York 19, Secy.

American College of Gastroenterology, Philadelphia, Oct. 23-29, 1960. Dr. Joseph Shaiken, Milwaukee, Pres.; Mr. Daniel Weiss, 33 West 60th, New York 23, Executive Director.

American College of Surgeons, San Francisco, Oct. 10-14, 1960. Dr. Owen H. Wangensteen, Minneapolis, Pres.; Dr. William E. Adams, 950 E. 59th St., Chicago, Secy.

American Heart Association, St. Louis, Oct. 21-25, 1961. Dr. A. Carlton Ernstene, Cleveland, Pres.; Mr. William F. McGlone, 44 E. 23rd, New York 10, Secy.

American Public Health Association, San Francisco, Oct. 31-Nov. 4, 1960. Dr. Malcolm H. Merrill, Berkeley, Calif., Pres.; Dr. Berwyn F. Mattison, 1790 Broadway, New York 19, Executive Secy.

American Society of Anesthesiologists, New York, Oct. 2-7, 1960. Dr. J. Earl Remlinger, Jr., Wilmette, Ill., Pres.; Dr. Robert L. Patterson, 612 Bershire Drive, Pittsburgh 15, Secy.

Southern Medical Association, St. Louis, Oct. 31-Nov. 3, 1960. Dr. Edwin H. Lawson, New Orleans, Pres.; Mr. Robert F. Butts, 2601 Highland Ave., Birmingham 5, Ala., Executive Secy.

Southern Psychiatric Association, Virginia Beach, Va., Oct. 2-4, 1960. Dr. David A. Wilson, Charlottesville, Va., Pres.; Dr. Richard Proctor, Winston-Salem, N. C., Secy.

Southwest Regional Cancer Conference, Fort Worth, Oct. 23, 1960. Dr. Robb Rutledge, Fort Worth, Chm.; Mrs. Ira Frances Ball, Westchester House, Fort Worth, Secy.

Southwestern Medical Association, El Paso, Oct. 20-22, 1960. Dr. R. L. Deter, El Paso, Pres.; Dr. Merle Thomas, 1501 Arizona Building, El Paso, Secy.

Texas Academy of General Practice, Dallas, Oct. 3-5, 1960. Dr. E. Sinks McLarty, Galveston, Pres.; Mr. Donald C. Jackson, 1905 N. Lamar, Austin, Executive Secy.

Texas Society on Aging, Houston, Oct. 6-8, 1960. Dr. Ernest W. Keil, Temple, Pres.; Mrs. William B. Ruggles, 3701 Stratford, Dallas, Secy.-Treas.

Texas Surgical Society, San Antonio, Oct. 3-4, 1960. Dr. Robert Wilson Crosthwait, Waco, Pres.; Dr. G. V. Brindley, Jr., Scott and White Clinic, Temple, Secy.

Oklahoma City Clinical Society Conference, Oklahoma City, Oct. 24-26, 1960. Dr. Vernon D. Cushing, Oklahoma City, Pres.; Miss Alma F. O'Donnell, 503 Medical Arts Bldg., Oklahoma City 2, Executive Secy.

National and Regional

American Academy of Allergy, Washington, D. C., Feb. 6-8, 1961. Dr. Bram Rose, Montreal, Canada, Pres.; Dr. Joseph Noah, 100 N. Euclid Ave., St. Louis 8, Mo., Secy.

American Academy of Dermatology and Syphilology, Chicago, Dec. 3-8, 1960. Dr. Francis W. Lynch, St. Paul, Minn., Pres.; Dr. Robert R. Kierland, Mayo Clinic, Rochester, Minn., Secy.

American Academy of General Practice, Miami, April 17-20, 1961. Dr. John G. Walsh, Sacramento, Calif., Pres.; Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Executive Secy.

American Association for Maternal and Infant Health. Dr. M. Edward Davis, Chicago, Pres.; Mrs. Patricia Dorr, 116 S. Michigan Ave., Chicago 3, Executive Director.

American Association for Thoracic Surgery. Dr. William E. Adams, Chicago, Pres.; Dr. Hiram T. Langston, 7730 Corondelet Ave., St. Louis 5, Secy.

American Association of Genito-Urinary Surgeons. Dr. Reed M. Nesbitt, Ann Arbor, Mich., Pres.; Dr. W. J. Engel, 2020 E. 93rd St., Cleveland 6, Secy.

American Association of Plastic Surgeons, May 17, 1961. Dr. Herbert Conway, New York City, Pres.; Dr. Thomas D. Cronin, 6615 Travis St., Houston 25, Secy.

American College of Allergists, Dallas, March 12-17, 1961. Dr. Giles A. Koelsche, Rochester, Minn., Pres.; Mr. Eloi Bauers, 2160 Rand Tower, Minneapolis, Executive Vice-Pres.

American College of Chest Physicians, New York City, June 22-26, 1961. Dr. M. Jay Flipse, 550 Brickell, Miami, Pres.; Mr. Murray Kornfeld, 112 E. Chestnut, Chicago 11, Executive Director.

American College of Obstetricians and Gynecologists. Dr. John I. Brewer, Chicago, Pres.; Mr. Donald F. Richardson, P. O. Box 749, Chicago 90, Executive Secy.

American College of Physicians, Miami Beach, May 8-12, 1961. Dr. Chester S. Keefer, Boston, Pres.; Dr. E. C. Rosenow, Jr., 4200 Pine St., Philadelphia 4, Executive Director.

American Congress of Physical Medicine and Rehabilitation. Dr. F. J. Kottke, Minneapolis, Pres.; Dorothea C. Augustin, 30 N. Michigan Ave., Chicago 2, Executive Secy.

American Dermatological Association. Dr. Marion B. Sulzberger, New York, Pres.; Dr. Wiley M. Sams, 308 Ingraham Bldg., Miami 32, Secy.

American Gastroenterological Association, Chicago, May 25-27, 1961. Dr. Hugh Butt, Rochester, Minn., Pres.; Dr. Wade Volwiler, Dept. of Medicine, University of Washington, Seattle 5, Secy.

American Gynecological Society. Dr. Karl H. Martzloff, Portland, Pres.; Dr. A. A. Marchetti, 3800 Reservoir Rd. N.W., Washington 7, D.C., Secy.

American Hospital Association. Dr. Russell A. Nelson, Baltimore, Md., Pres.; Dr. Edwin L. Crosby, 18 E. Division Street, Chicago, Executive Director.

American Laryngological, Rhinological, and Otological Society, Lake Placid Club, May 23-25, 1960. Dr. Fletcher D. Woodward, Charlottesville, Va., Pres.; Dr. C. S. Nash, 708 Medical Arts Bldg., Rochester, N. Y., Secy.

American Neurological Association, Atlantic City, June 12-14, 1961. Dr. H. G. Wolff, New York City, Pres.; Dr. M. D. Yahr, 710 W. 16th St., New York 32, Secy.

American Ophthalmological Society, Hot Springs, Va., May 17-19, 1961. Dr. Edwin B. Dunphy, Boston, Pres.; Dr. Joseph A. C. Wadsworth, 108 E. 68th, New York 21, Secy.

American Orthopaedic Association, Yosemite National Park, May 22-25, 1961. Dr. Edwin F. Cave, Boston, Pres.; Dr. Lee Ramsay Straub, 535 E. 70th St., New York 21, Secy.

American Pediatric Society, Atlantic City, May 2-5, 1961. Dr. L. Emmett Holt, New York City, Pres.; Dr. Conrad M. Riley, Denver General Hospital, Denver 4, Secy.

American Proctologic Society. Dr. H. R. Reichman, Salt Lake City, Pres.; Dr. Norman D. Nigro, 10 Peterboro, Detroit 1, Secy.

American Psychiatric Association, Chicago, May 7-12, 1961. Dr. Robert H. Felix, Bethesda, Md., Pres.; Austin M. Davies, 1270 Avenue of the Americas, New York 20, Exec. Assistant.

American Surgical Association, White Sulphur Springs, W. Va., April 3-6, 1960. Dr. Warren H. Cole, Chicago, Pres.; Dr. William Altemeier, Cincinnati General Hospital, Cincinnati 29, Secy.

American Urological Association, Los Angeles, May 22-25, 1961. Dr. John E. Heslin, Albany, N. Y., Pres.; Mr. William P. Didusch, 1120 N. Charles St., Baltimore 1, Executive Secy.

International College of Surgeons, U. S. Chapter. Dr. Henry Meyerding, Rochester, Minn., Pres.; Dr. Ross T. McIntire, 1516 Lake Shore Dr., Chicago, Executive Director.

National Tuberculosis Association, Cincinnati, Ohio, May 21-26, 1961. Mr. Herbert C. De Young, Chicago, Pres.; Judge Herman Dehnke, 213 Main, Harrisville, Mich., Secy.

Radiological Society of North America, Cincinnati, Ohio, Dec. 4-9, 1960. Dr. Lawrence L. Robbins, Boston, Pres.; Dr. Donald S. Childs, 713 E. Genesee, Syracuse 2, N. Y., Secy.

South Central Association of Blood Banks, New Orleans, March 3-4, 1961. Dr. Kenneth M. Heard, Jackson, Miss., Pres.; L. Ruth Guy, Ph.D., Room 1101, Stoneleigh Hotel, Dallas, Secy.

Southern Surgical Association, Boca Raton, Fla., Dec. 6-8, 1960. Dr. Francis Massie, Pres.; Dr. John D. Martin, Jr., Emory University, Ga., Secy.

Southwest Allergy Forum, Rio Grande Valley, Spring, 1961. Dr. Johnny A. Blue, Oklahoma City, Pres.; Dr. George L. Winn, Suite 104, Lister Medical Building, 430 Northwest Twelfth St., Oklahoma City, Secy.

Southwestern Society of Nuclear Medicine, San Antonio. Dr. Peter E. Russo, Oklahoma City, Pres.; Dr. J. R. Maxfield, Jr., 2711 Oak Lawn Avenue, Dallas, Secy.

Southwestern Surgical Congress, St. Louis, April 10-13, 1961. Dr. Howard D. Cogswell, Tucson, Ariz., Pres.; Mary O'Leary, 813 Medical Arts Bldg., Oklahoma City, Exec. Secy.

United States-Mexico Border Public Health Association, San Diego, June 25-29, 1961. Dr. Adán Mercado Cerda, Tamaulipas, Mexico, Pres.; Dr. Ulpiano Blanco, El Paso, Secy.

State

Texas Academy of Internal Medicine, Dallas, December, 1960. Dr. Robert Mitchell, Plainview, Pres.; Dr. Sam Arnett, 2609 19th St., Lubbock, Secy.

Texas Air-Medics Association, Galveston, April 22-25, 1961. Dr. C. D. Henry, San Antonio, Pres.; Dr. C. F. Miller, Box 1338, Waco, Secy.

Texas Association for Mental Health, Galveston, 1961. Mr. William R. Ransone, Dallas, Pres.; Mrs. Lawrence Marcus, 3525 Arrowhead Drive, Dallas, Secy.

Texas Association of Obstetricians and Gynecologists, Houston, Feb. 10-11, 1961. Dr. Oran V. Prejean, Dallas, Pres.; Dr. Hugh W. Savage, 815 Fifth Ave., Fort Worth, Secy.

Texas Association of Public Health Physicians, Galveston, April 22-25, 1961. Dr. L. P. Walter, Austin, Pres.; Dr. W. V. Bradshaw, Jr., 1800 University Drive, Fort Worth, Secy.

Texas Club of Internists. Dr. W. W. Bondurant, Jr., San Antonio, Pres.; Dr. T. Haynes Harvill, Medical Arts Building, Dallas 1, Secy.

Texas Chapter, American Academy of Pediatrics, Galveston, April 22-25, 1961. Dr. J. T. Bennett, El Paso, Pres.; Dr. W. W. Kelton, Jr., 108 West 30th, Austin, Secy.

Texas Chapter, American College of Chest Physicians, Galveston, April 22-25, 1961. Dr. Hiram M. Anderson, San Angelo, Pres.; Dr. Milton V. Davis, 3707 Gaston Avenue, Dallas, Secy.-Treas.

Texas Dermatological Society, Galveston, April 22-25, 1961. Dr. M. W. Harrison, Houston, Pres.; Dr. D. Shelton Blair, 1609 Medical Arts Building, Dallas, Secy.-Treas.

Texas Diabetes Association, Galveston, April 22-25, 1961. Dr. James A. Greene, Houston, Pres.; Dr. John W. Chriss, 2436 Morgan Street, Corpus Christi, Secy.-Treas.

Texas Hospital Association, Dallas, May 15-17, 1961. Dr. F. R. Higginbotham, San Antonio, Pres.; Mr. O. Ray Hurst, 1905 N. Lamar, Austin, Executive Director.

Texas Industrial Medical Association, Galveston, April 22-25, 1961. Dr. Noble B. Daniel, Texarkana, Pres.; Dr. J. G. Burdick, Pasadena, Secy.

Texas Neuropsychiatric Association, Galveston, April 22-25, 1961. Dr. Clarence S. Hoekstra, Dallas, Pres.; Dr. E. Ivan Bruce, Jr., Galveston, Secy.-Treas.

Texas Ophthalmological Association, Galveston, April 22-25, 1961. Dr. Otto Lippmann, Austin, Pres.; Dr. James H. Scruggs, Waco, Secy.

Texas Orthopedic Association, Galveston, April 22-25, 1961. Dr. Ike S. McReynolds, Houston, Pres.; Dr. Margaret Watkins, Dallas, Secy.-Treas.

Texas Otolaryngological Association, Galveston, April 22-25, 1961. Dr. August J. Streit, Amarillo, Pres.; Dr. Louis E. Adin, Jr., Dallas, Secy.

Texas Physical Medicine and Rehabilitation Society, Galveston, April 22-25, 1961. Dr. Edward M. Krusen, Dallas, Pres.; Dr. Oscar Selke, Medical Professional Building, Houston, Secy.

Texas Proctologic Society, Houston, February, 1961. Dr. J. Wade Harris, Houston, Pres.; Dr. H. Gray Carter, 915 St. Joseph St., Dallas, Secy.

Texas Public Health Association, Fort Worth, March 5-8, 1961. Mrs. Maggie Belle Davis, Corpus Christi, Pres.; Mr. Joseph N. Murphy, Jr., Box 4012, Austin 51, Executive Secy.

Texas Radiological Society, Fort Worth, Jan. 20-21, 1961. Dr. Delphin von Briesen, El Paso, Pres.; Dr. R. P. O'Bannon, 1216 Pennsylvania, Fort Worth, Secy.

Texas Rheumatism Association, Dallas, Dec. 9, 1960. Dr. Howard C. Coggeshall, Dallas, Pres.; Dr. J. Morris Horn, 3707 Gaston, Dallas, Secy.

Texas Society of Anesthesiologists, Galveston, April 22-25, 1961. Dr. Randle J. Brady, Houston, Pres.; Dr. Eugene L. Slataper, Houston, Secy.

Texas Society of Athletic Team Physicians, Galveston, April 22-25, 1961. Dr. W. S. Horn, Jr., Fort Worth, Pres.; Dr. Louis Levy, Fort Worth, Secy.-Treas.

Texas Society of Gastroenterologists and Proctologists, Galveston, April 22-25, 1961. Dr. H. Gray Carter, Dallas, Pres.; Dr. A. C. Broders, Jr., Temple, Secy.-Treas.

Texas Society of Pathologists, Inc., Galveston, April 22-25, 1961. Dr. O. J. Wollenman, Jr., Fort Worth, Pres.; Dr. Vernie A. Stembridge, Dallas, Secy.-Treas.

Texas Society of Plastic Surgeons, Galveston, April 22-25, 1961. Dr. J. B. Patterson, Fort Worth, Pres.; Dr. Raymond O. Brauer, Houston, Secy.-Treas.

Texas State Board of Medical Examiners, Fort Worth, Dec. 1-3, 1960. Dr. M. H. Crabb, Fort Worth, Secy.; Mrs. Carolyn H. Millard, 1714 Medical Arts Bldg., Fort Worth, Assistant Secy.

Texas Society of Ophthalmology and Otolaryngology, San Antonio, Dec. 2-3, 1960. Dr. Lyle J. Logue, Houston, Pres.; Dr. Oliver Suehs, 14 Medical Arts Square, Austin, Secy.

Texas Traumatic Surgical Society, Galveston, April 22-25, 1961. Dr. Edward R. Rowe, Galveston, Pres.; Dr. John C. Long, Plainview, Secy.-Treas.

Texas Tuberculosis Association, Corpus Christi, March 16-18, 1961. Dr. J. Edward Johnson, Pres.; Miss Pansy Nichols, P. O. Box 6158, Austin 21, Executive Director.

Texas Urological Society, Wichita Falls, January 21-22, 1961. Dr. Joseph Mitchell, Dallas, Pres.; Dr. O. C. Berg, 1300 8th St., Wichita Falls, Secy.

District

First District Society, Pecos, Feb. 3, 1961. Dr. Russell Holt, El Paso, Pres.; Dr. Gordon L. Black, 1501 Arizona St., El Paso, Secy.

Second District Society, Snyder, 1961. Dr. M. J. Loring, Midland, Pres.; W. S. Parks, Jr., 2009 W. Wall, Midland, Secy.

Third District Society, Lubbock. Dr. Grady M. Wallace, Lubbock, Pres.; Dr. H. Fred Johnson, 2308 W. Eighth, Amarillo, Secy.

Fourth District Society, San Angelo, May, 1961. Dr. J. G. Bodenhamer, Mason, Pres.; Dr. M. D. Knight, 234 W. Beauregard, San Angelo, Secy.

Fifth and Sixth Districts Society, Corpus Christi, July 8-9, 1961. Dr. John W. Chriss, Pres.; Dr. James Gabbard, 1001 Louisiana, Corpus Christi, Secy.

Seventh District Society. Dr. Robert N. Snider, Austin, Pres.; Dr. Richard Lucas, 502 W. 13th, Austin, Secy.

Eighth District Society, Corpus Christi. Dr. M. Warren Hardwick, Angleton, Pres.; Dr. J. L. Coleman, Box 3346, Victoria, Secy.

Ninth District Society, Bellville, Spring, 1961. Dr. Irving M. Watson, Jr., Conroe; Dr. William E. Sharp, 721 E. Texas, Baytown, Secy.

Eleventh District Society, Jacksonville. Dr. Marlin T. Braswell, Henderson, Pres.; Dr. Floyd Verheyden, 813 John St., Jacksonville, Secy.

Twelfth District Society, Waco, January 10, 1961. Dr. Bernard Rosen, Corsicana, Pres.; Dr. R. L. Campbell, 205 S. 15th St., Corsicana, Secy.

Thirteenth District Society, Fort Worth, Fall, 1960. Dr. William B. Allensworth, Mineral Wells, Pres.; Dr. R. D. Moreton, 1217 W. Cannon, Fort Worth, Secy.

Fifteenth District Society. Dr. Charles Wise, Naples, Pres.; Dr. George Bennett, 402 S. Bolivar, Marshall, Secy.

Clinics

Blackford Memorial Cancer Lectures, Denison, Nov. 11, 1960. Dr. Andrew Jackson, Denison, Chm.

Dallas Southern Clinical Society Conference, Dallas, March 20-22, 1961. Dr. Frank H. Kidd, Jr., Dallas, Pres.; Millard J. Heath, 433 Medical Arts Bldg., Dallas 1, Executive Officer.

International Medical Assembly of Southwest Texas, San Antonio, Jan. 23-25, 1961. Dr. Max E. Johnson, San Antonio, Pres.; S. E. Cockrell, 202 W. French Place, San Antonio, Exec. Secy.

New Orleans Graduate Medical Assembly, New Orleans, March 6-9, 1961. Dr. Maurice E. St. Martin, New Orleans, Pres.; Mrs. Irma B. Sherwood, 430 Tulane Ave., New Orleans 12, Executive Secy.

North Texas-Southern Oklahoma Fall Clinical Conference. Dr. Frank J. Lee, 1300 8th, Wichita Falls, Chm.

Postgraduate Medical Assembly of South Texas, Houston, July 10-12, 1961. Dr. C. Forrest Jorns, Houston, Pres.; Mrs. W. H. Dahme, 412 Jesse H. Jones Library Bldg., Houston 25, Exec. Secy.

Private Clinics and Hospitals, Dallas, December, 1960. Dr. Vance Terrell, Stephenville, Pres.; Mr. B. J. Warren, Deaton Hospital, Galena Park, Secy.

Board Examinations

Texas State Board of Examiners in Basic Sciences, Austin, Houston, Galveston and Dallas. Henry B. Hardt, Ph.D., Fort Worth, Pres.; Mrs. Betty J. Anderson, Chief Clerk, State Office Bldg., 201 E. 14th St., Austin.

MEDICOLEGAL NOTES

Consent Should Be Obtained Before Hazardous Procedures

The various legal aspects of obtaining consent from patients prior to the performance of surgery and certain other procedures has been discussed in my column on numerous occasions, and physicians are normally keenly aware of the necessity for such consent.

Failure to obtain valid consent from the patient for medical and/or surgical care and treatment may well subject the physician to liability for damages for what amounts to a technical assault and battery. Such would be true, in the absence of an emergency, even though the medical and surgical treatment was beneficial to the patient and was performed without negligence on the part of the physician.

Aside from the need of obtaining this consent, there appears to be a rising incidence of cases involving the failure to obtain "informed consent." Two recent court decisions—one in Kansas and the other in Missouri—have held that a physician who fails to inform a patient of the possible serious collateral hazards of a medical or surgical procedure may be held liable for malpractice even though the physician follows approved standards of medical care.

In the Kansas case (Natanson vs. Kline, 350 P. 2d 1093), the Supreme Court of that state held that a radiologist who failed to fully advise his patient of the possible hazards of cobalt irradiation treatments was guilty of malpractice. The court in this case was careful to point out that such holding was not based on a charge of assault and battery, but rather on negligence for the failure to obtain an informed consent. However, the court stated that where the patient is fully aware of the dangers involved, his consent to the treatment would constitute an informed consent.

In the Missouri case (Mitchell vs. Robinson, 334 SW 2d 11), the Supreme Court of that state held that the physicians ". . . owed their patient in possession of his faculties the duty to inform him, generally, of the possible serious collateral hazards" of combined electroshock and insulin subcoma therapy. The treatment in this case resulted in fracture of several vertebrae, and the patient sued to recover damages for these injuries. He denied that the physicians had informed him of these possible dangers and testified that if he had known of them, he would not have consented to the treatment.

The implication of these cases is readily evident. In instances in which the contemplated surgery or course of treatment is particularly hazardous, the physician has an obligation to the patient to make known this fact. Therefore, if consent is given to the course of treatment it will be an informed one. Although to date there have been no cases before the appellate courts in which this particular issue was raised, it is possible that our courts might follow the reasoning of the Missouri and Kansas courts.

Because of this possibility, I would recommend that physicians make known to their patients any above-average hazards present in a particular course of treatment being contemplated. If the patient is still agreeable, then I would suggest further that the consent form used, besides designating the procedure or treatment to be performed, set forth that certain hazards are present and that after being fully apprised of such dangers, the patient, nevertheless, requests and authorizes the physician to undertake such procedure or treatment. This type of consent form lessens the likelihood of a subsequent allegation that an "informed consent" was not obtained. Of course, the mere obtaining of this type of consent from the patient does not relieve the physician from the obligation actually to make the dangers known to the patient.

Physicians and hospitals should cooperate closely in cases where hazardous procedures or treatment are being contemplated so that adequate consent forms may be used to help insure that the patient has given an "informed consent." By these simple precautions, the physician may well avoid the possibility of a suit involving failure to obtain "informed consent."

—PHILIP R. OVERTON, LL.B., Austin.

Southern Medical Section Plans St. Louis Meet

The Section on Ophthalmology and Otolaryngology of the Southern Medical Association will hold its annual meeting October 31-November 3 in St. Louis.

A live color television program on "Preventive and Curative Treatment of Retinal Detachment" will open the session. Presenting it with the assistance of the department's staff are Dr. Paul A. Cibis, associate professor of clinical ophthalmology, and Dr. Bernard Becker, professor and chairman of the Department of Ophthalmology, both of Washington University School of Medicine, St. Louis.

Presenting papers Monday afternoon are Dr. Theodore E. Walsh, Dr. James E. Miller, Dr. Robert N. Tindall, Dr. Robert A. Moses, and Dr. Guerdan Hardy, all of St. Louis.

Tuesday speakers and their topics are as follows:

Dr. George M. Haik of New Orleans, the chairman's address, "Subluxated and Dislocated Lenses"; Dr. A. D. Ruedemann, Jr., Detroit, "A Clinical Study of Alternating Hypertropia"; Dr. William W. Vollotton, Charleston, S. C., "Iatrogenic Eye Diseases"; Dr. Harry Harwich and Dr. David Kosner, both of Coral Gables, Fla., "Effect of Whiplash Injuries on Ocular Functions"; Dr. Alston Callahan, Birmingham, Ala., "More Recent Experience with Alpha-Chymotrypsin"; Dr. John Nowell and Dr. George Ellis, New Orleans, "Light Coagulation in Treatment of Retinal Disease"; Dr. Wendell D. Gingrich, Galveston, "Therapy of Cephalosporium Keratomycosis"; Dr. Clay W. Evatt, Charleston, S. C., "Congenital Cataracts"; and Dr. Robert A. Schimek, New Orleans, "Useful Variations in Techniques for Surgery of Blepharoptosis."

The session will be closed with "Contact Lens Symposium" by Dr. Thomas J. Van Zant, Houston; Dr. Donald Fonda, Ridgewood, N. J.; Dr. Jack Lee, San Antonio; and Captain Norris L. Newton, M.C., Brooks Air Force Base, San Antonio.

Wednesday papers and topics are as follows:

Dr. William M. Trible, Washington, D. C., "Destructive Lesions of the Superior Maxilla Resembling Malignancy"; Dr. Donald F. Proctor, Baltimore, "Bleeding Following Tonsil and Adenoid Operations"; Dr. Lyle M. Sellers, Dallas, "The Round Window—A Critical Reevaluation"; Dr. Ben H. Senturia, Dr. Robert Goldstein, and Dr. Benjamin Rosenbluth, St. Louis, "Results of Mastotympanic Surgery: A Critical Evaluation"; Dr. Harry Zoller, New Orleans, "Stapedectomy with Vein Graft for Deafness Due to Otosclerosis"; and Round Table Discussion with Dr. Lyle Sellers, Dr. Ben Senturia, Dr. Harry Zoller, and Dr. Miles Lewis, Jr., New Orleans.

Further information may be obtained from Dr. A. C. Esposito, Suite 1212, First Huntington National Bank Building, Huntington 1, W. Va.

Dallas Doctor to Become Director of College of Surgeons

Dr. John Paul North of Dallas will become the director of the American College of Surgeons, January 31, 1961, following the organization's annual meeting Oct. 10-14, 1960, in San Francisco. He will succeed Dr. Paul R. Hawley, director since 1950.

Dr. North has been chief of the Surgical Service, Veterans Hospital, Dallas, since 1955.

Medical Assistants Plan October Meeting in Dallas

The American Association of Medical Assistants has scheduled its fourth annual national convention next month in Dallas. Meeting dates are October 14-16.

Featured will be an educational seminar and a leadership seminar. For the first, talks will include, "Waiting Room Atmosphere"; "The Hospital, the Doctor, and You"; and "The Problem of Medical Care Cost in the 60's."

The leadership seminar will feature lectures on credit and office management and a roundtable discussion of physician-assistant-patient relationships.

Speakers at the meeting will include Dr. E. Vincent Askey, President of the American Medical Association; Dr. May Owen, President of the Texas Medical Association; Dr. Milford O. Rouse, Dr. Elliott Mendenhall, and Dr. Edward A. Newell, all of Dallas; and Dr. Leo J. Starry of Oklahoma City.

New York University Sets Endocrine Organs Symposium

"Surgery of Endocrine Organs" will be the subject of a 3 day symposium conducted by the schools of medicine of New York University Medical Center, November 17 to 19.

Directors of the symposium are Dr. John H. Mulholland, professor and chairman of the Department of Surgery, and Dr. S. Arthur Localio, professor of clinical surgery.

Further details and application forms may be obtained from the Office of the Associate Dean, New York University Post-Graduate Medical School, 550 First Avenue, New York 16, N. Y.

State Board of Medical Examiners

The next meeting of the Texas State Board of Medical Examiners will be held December 1-3 at the Hilton Hotel, Fort Worth. Examinations will be given and applications for license by reciprocity will be considered.

Completed applications for the examination of graduates from medical schools in the United States must be filed with the state office 30 days before the meeting. For graduates outside the United States and for applicants for reciprocity, applications must be filed 60 days prior to the meeting.

Applications should be filed with the Texas State Board of Medical Examiners, Office of the Secretary, 1714 Medical Arts Building, Fort Worth 2.

Chest Physicians Set Meeting

Scheduling its seventeenth annual meeting at the Statler-Hilton Hotel in St. Louis is the Southern Chapter of the American College of Chest Physicians. Meeting dates are October 30-31, and physicians are invited to attend without a registration fee.

Further information may be obtained from the American College of Chest Physicians, 112 East Chestnut Street, Chicago 11.

Texas Surgical Society Sets Semi-Annual Meeting

Texas Surgical Society will hold its semi-annual fall meeting on October 2, 3, and 4 in San Antonio.

Dr. John A. Schilling, professor and head of the Department of Surgery of the University of Oklahoma School of Medicine, Oklahoma City, will be guest speaker for the meeting. He will deliver two papers.

The Right Reverend Bishop Everett H. Jones of the Episcopal Church at San Antonio will be banquet speaker at 8 p.m. on October 2, the opening day. His topic will be "The Doctor and the Minister."

Speakers and their topics include Dr. R. Wilson Crosthwait of Waco, "Texas Surgical—Past, Present, and Future"; Dr. Luke W. Able of Houston, "Extrophy of the Bladder: Anatomical Reconstruction"; Dr. Thomas D. Cronin and Dr. Thomas H. Guthrie, both of Houston, "The Surgery of Hypospadias"; Dr. John A. Schilling, "Recent Studies in Wound Healing"; Dr. Roy H. Baskin of Waco, "Pulmonary Tuberculosis: Report of Several Unusual Cases"; Dr. W. S. Lorimer, Jr., Dr. Fred C. Rehfeldt, and Dr. Robb Rutledge, all of Fort Worth, "Carotid Angioplasty."

Also, Dr. James E. Pridgen of San Antonio, "Leiomyosarcoma of the Stomach"; Dr. T. June Melton, Jr. and Dr. Martha Madsen, both of Midland, "Adenocarcinoma of the Apendix—Presentation of a Case"; Dr. Joe T. Gilbert of Austin, "Appendix Duplex Appendicitis in the Presence of Situs Inversus"; Dr. Walter C. Watkins of Amarillo, "The Surgical Treatment of Congenital Megacolon"; Dr. Howard R. Dudgeon, Jr. of Waco, "The Role of Aberrant Tendons in DeQuervain's Disease"; Dr. William R. Klingensmith, Jr. of Amarillo, "Injuries to the Diaphragm."

Also, Dr. Edwin M. Sykes, Jr. and Dr. Ernest Gregory, both of San Antonio, "Acute Enterocolitis Necrotans"; Dr. E. K. Blewett of Austin, "A Critique on the Stein-Levinthal Syndrome"; Dr. R. J. White of Fort Worth, "Carcinoma of the Pancreas, Presenting As Acute Duodenal Obstruction —A Report of Four Cases"; Dr. Schilling, "Pathophysiology of Intestinal Obstruction"; Dr. Phillip L. Day and Dr. John J. Hinchey, both of San Antonio, "A Follow-up Study of Some 200 Operated Herniated Intervertebral Lumbar Discs"; and Dr. M. Bradfield Oxford of San Antonio, "Meconium Peritonitis."

Joint Medical Meeting

The Medical Society of the United States and Mexico will hold its fifth annual meeting in Guadalajara, Jalisco, Mexico, on November 8, 9, and 10; and in Mazatlan, Sinaloa, Mexico, on November 11 and 12.

Further information about the meeting may be received by writing M. A. Carreras, M.D., 130 South Scott, Tucson, Ariz.

Texas Physicians Are Speakers

Among speakers at the Society of Nuclear Medicine at Estes Park, Colo., recently were Dr. Raymond G. Rose and Dr. Mavis P. Kelsey of The University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, who discussed statistical results from the use of radioiodine therapy in 63 patients with thyroid cancer in the last 11 years.

Dr. James R. Maxfield, Jr., of Dallas, also was a speaker at the meeting.

Lummis Foundation Symposium To Be Held October 22 in Houston

The Frederick Rice Lummis Medical Foundation, established for medical education, research, and community welfare, is sponsoring the second annual 1 day symposium this year on pulmonary diseases on October 22 at the Jesse Jones Library Building at the Texas Medical Center in Houston.

Speakers include Dr. Maurice S. Segal, Department of Inhalation Therapy, Boston City Hospital, Boston; Dr. H. Corwin Hinshaw, University of California School of Medicine, San Francisco; Dr. John B. Hickman, Department of Medicine, Indiana University School of Medicine, Indianapolis; Dr. Joel E. Reed, Diagnostic Clinic of Houston, Houston. In addition, there will be a clinical pathologic conference which will be discussed by the guest speakers.

There is no registration fee. For further information, those interested may contact Dr. William M. Donohue, Diagnostic Clinic of Houston, 6448 Fannin, Houston.

American Public Health Association To Meet in San Francisco

The August, 1960, issue of the *Texas State Journal of Medicine* carried a news story which incorrectly stated the site of the eighty-eighth annual meeting of the American Public Health Association. The Association will meet in San Francisco (not New York) on the dates specified in the earlier article—October 31 to November 4. Additional information may be obtained from Dr. Berwyn F. Mattison, Executive Director, American Public Health Association, 1790 Broadway, New York 19.

General Practice Physicians Announce Speakers for 1960

Among outstanding speakers at the 1960 Scientific Assembly of Texas Academy of General Practice to be held October 3-5 in Dallas will be Dr. Hampar Kelikian, associate professor of Orthopedic Surgery at Northwestern University Medical School and a former president of the Regional Trauma Society of American College of Surgeons; Dr. William J. Block, San Antonio, president of the Southwest Texas Heart Association; and Dr. J. E. Miller, clinical professor of radiology at the University of Texas Southwestern Medical School, Dallas, and former president of the Texas Radiological Society.

Pediatrics Seminar at New Orleans

"Advances in Pediatric Therapy" will be the topic of a September 23 seminar at the Roosevelt Hotel in New Orleans.

Approved by the American Academy of General Practice for Category I credits, the seminar is sponsored by the Louisiana Chapter of the American Academy of Pediatrics and the American Academy of General Practice.

Further information may be obtained from the Louisiana State Medical Society, 1430 Tulane Avenue, New Orleans.

Neuropsychiatrists Meet Next Month in Austin

Scheduled for October 28-29 in Austin is the sixth joint meeting of the Sociedad Mexicana de Neurologia Y Psiquiatria and the Texas Neuropsychiatric Association.

Speakers include Dr. Agustin Caso, president of the Mexican Society of Neurology and Psychiatry; Dr. Clarence S. Hoekstra of Dallas, president of the Texas Neuropsychiatric Association, opening remarks; Dr. David T. Wells, Austin, "Results of State Hospital Therapy of Patients Admitted from Training Schools for Delinquent Boys"; Dr. Samuel Hoerster, Jr., Dr. Jedd H. Green, Dr. James H. Gardner, and Dr. Hugh Brown, Austin, "Use of Hydralazine in the Treatment of Huntington's Chorea"; Dr. T. M. Runge, Dr. S. W. Bohls, Dr. Hoerster, and Mrs. Nawasa Thurman, Austin, "Infrared Spectroscopic and Chromatographic Studies in Psychotic and Normal Individuals"; Dr. Coleman De Chenar, Austin, "Intracerebral Sarcoma with Pulmonary and Hepatic Metastases"; Dr. Bohls, Austin, "Organization of Laboratory Services in a State Hospital"; and Dr. Bohls and Mrs. Rosselle Crick, Austin, "Necessity of Routine Examination for Early Uterine Malignancy in Patients Admitted to State Hospitals."

Speakers and their topics for the afternoon session:

Dr. Bohls and Mrs. Thurman, Austin, "Incidence of Hemoglobin Abnormalities in Patients at the Austin State Hospital"; Dr. Howard Alexander, Wichita Falls, "Combined Stelazine, Convulsive Electrical Stimulation and Nonconvulsive Electrical Stimulation in the Treatment of Schizophrenia"; Dr. J. B. Des Rochers, San Antonio, "Psychiatric Service in a Tuberculosis Hospital"; and Dr. John S. Peek, Rusk, "Treatment of the Alcoholic in a State Hospital."

Speakers and their topics on Saturday morning:

Dr. Preston E. Harrison and Dr. F. E. Williams, Big Spring, "Survival Following Ingestion with Suicidal Intent of Massive Doses of Tranquilizers"; Dr. S. Bergen Morrison, Waco, "Erratic Teenage Behavior, A Case Report"; Dr. John A. Boston, Jr., and Dr. Wade Lewis, Austin, "A Case of Pseudo-Megacolon in a Child"; Dr. George Ehni, Houston, "Congenital Absence of the Corpus Callosum Accompanied by Hydrocephalus"; and Dr. William T. Lhamon and Dr. John Kinross-Wright, Houston, "Aspects of Day Hospitals."

Industrial Health Congress To Be Held in North Carolina

Representatives of industry, agriculture, governmental agencies, and medicine will gather in Charlotte, N. C., October 10-12 for the twentieth Congress on Industrial Health.

The congress is sponsored by the American Medical Association's Council on Occupational Health and is held each year to develop and to maintain high medical standards in industry and on the farm.

Established in 1938, the council supports safe and healthful working conditions for employees through medical supervision of workers, control of environment, health education, and counseling, according to Dr. B. Dixon Holland, council secretary. The congress programs are primarily directed toward the general practitioner.

EDUCATION

Workshop Program Set By Nursing League

Miss Ruth L. Smith of Drexel Hill, Pa., has been named director of a new workshop program sponsored by the Texas League for Nursing, Inc. The league has received a grant of $71,700 for the program from the Division of Nursing Resources of the Department of Health, Education, and Welfare.

The short-term training program in nursing management skills was instigated by the league after a 2 year study on nursing needs and resources by the Texas Graduate Nurses' Association, Texas League for Nursing, and Board of Nurse Examiners for the State of Texas, in association with the Texas Commission on Patient Care.

During the first year, three workshops are planned for head nurses. They will be repeated in four regional areas. Objectives are to make key nursing personnel more aware of responsibilities for planning and evaluating nursing care and for developing the personnel assigned to nursing service, and to provide the tools to carry out these responsibilities more effectively.

Communicable Disease Center Announces Refresher Courses

The Laboratory Branch of the Department of Health, Education, and Welfare's Communicable Disease Center at Atlanta, Ga., will offer a series of laboratory refresher training courses from October 10, 1960, to April 7, 1961.

Courses included will be on virology, tuberculosis, rabies, staphylococci, microbiology, pulmonary mycoses, medical bacteriology, veterinary mycology, viral and rickettsial diseases, and enteric bacteriology.

Certain courses will be offered by special arrangement only, including those on malaria, virus techniques, corynebacterium diphtheriae, salmonella typhosa, leptospirosis, and streptococci.

Information and application forms may be obtained from the Laboratory Branch, Communicable Disease Center, U. S. Public Health Service, Atlanta 22, Georgia.

Vocational Nurses Examination

New schools approved at the July meeting of the State of Texas Board of Vocational Nurse Examiners were Bryan School of Nursing, Bryan, and Memorial Hospital School of Vocational Nursing, Dumas.

At the statewide examination held then, 343 candidates earned Vocational Nurse Licenses, and 21 applicants from other states were granted reciprocity licenses. Mrs. Sarah Danley Rice, a graduate of the Dallas Vocational School of Nursing, received the highest score on the examination.

Since the inception of the Vocational Nurse Law on September 7, 1951, 22,212 licenses have been issued. Of these, 13,312 licentiates qualified through waiver requirements; 8,683 were graduated from 12 months vocational nurse schools and passed the board examination; and 217 received licenses by reciprocity.

The next examination will be held in two sections on October 21 and 22.

State Board Names 15 to Honor Roll

Fifteen physicians who took the Texas State Board of Medical Examiners examination in June, 1960, have been included on the honor roll of those making grades 90 and above.

Included are Dr. William Christopher Duncan, Webster, South Dakota, now in Houston, who made the highest score; Dr. John Spafford Carleton of the University of Buffalo; Dr. Ronald Elton Costin of Dallas, now at Chanute Air Force Base in Illinois; Dr. Douglas Morgan Dennis, Dimmitt, now in Houston; Dr. Gary Evan Miller, Houston, now in Galveston; Dr. Robert Zempter Eanes, Galveston; Dr. Abbe Alzu Ledbetter, Jr., Houston, now in Galveston; Dr. Daniel Gordon Walker, Houston; Dr. John Richard Stafford, Houston; Dr. Louis Frank Israel, Houston; Dr. Richard Lee Mabry, Decatur, now in Dallas; Dr. Joe Sidney Stell, Jr., Houston; Dr. James Dennis Jett, Houston; Dr. Jerry Clyde Coker, Greenville, now in San Antonio; and Dr. Malcolm Leo Petway, Garland, now in Houston.

The board met in executive session on August 20 and 21 and issued 323 licenses by examination and 86 licenses by reciprocity.

Postgraduate Courses

Clinical Cardiopulmonary Physiology, Chicago, October 24-28.—The American College of Chest Physicians will sponsor a postgraduate course on Clinical Cardiopulmonary Physiology October 24-28 at the Sheraton Towers Hotel, Chicago. The course was arranged under the co-chairmanship of Dr. Albert H. Andrews, Associate Clinical Professor of Bronchoesophagology, University of Illinois College of Medicine, and Dr. Edwin R. Levine, Assistant Professor of Clinical Medicine, Chicago Medical School. Further information may be obtained by writing the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11.

Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lung, New York City, November 14-18.—The twelfth annual course on Recent Advances in the Diagnosis and Treatment of Diseases of the Heart and Lungs will be offered November 14-18 by the American College of Chest Physicians at the Park Sheraton Hotel in New York City. It was arranged under the co-chairmanship of Dr. Edgar Mayer, clinical professor of medicine, New York University Postgraduate Medical Center; Dr. Alfred S. Dooneief, lecturer in medicine, Columbia University College of Physicians and Surgeons; and Dr. Emil A. Naclerio, chief, Thoracic Surgical Services, Harlem and Columbus Hospitals, New York. Further information may be obtained from the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11.

Coronary Artery Disease, Houston, November 28-December 2.—A comprehensive symposium, Coronary Artery Disease, has been scheduled from November 28 through December 2, by The University of Texas Postgraduate School of Medicine at Houston. The 5 day program has been approved by the American Academy of General Practice for Category I credit. Further information may be obtained by writing the Office of the Dean, The University of Texas Postgraduate School of Medicine, 410 Jesse Jones Library Building, Texas Medical Center, Houston 25.

Recent Advances in Oral Therapy for Diabetes, Oklahoma City, November 9.—A postgraduate conference on recent advances in oral therapy for diabetes will be presented by the University of Oklahoma Medical Center on November 9 in Oklahoma City. Reservations may be made through the Postgraduate Office at the Medical Center, 800 Northeast 13, Oklahoma City.

Infectious Diseases, Dallas, October 1.—The University of Texas Southwestern Medical School, in association with the Texas Academy of General Practice, will hold a postgraduate seminar on infectious diseases on October 1 in Dallas. Members of the Academy of General Practice will be given 7 hours of credit for attendance. Registration for the course is $10. Further information may be obtained from John S. Chapman, M.D., Division of Postgraduate Education, The University of Texas Southwestern Medical School, 5323 Harry Hines Boulevard, Dallas 35.

Orthopedic Surgery, Dallas, November 17-19.—The University of Texas Southwestern Medical School at Dallas will present a postgraduate course on orthopedic surgery on November 17, 18, and 19 in Dallas. Further information may be received by writing to John S. Chapman, M.D., Division of Postgraduate Education, 5323 Harry Hines Boulevard, Dallas 35.

Physicians and Schools Conference Report Is Available to Physicians

"The Emotional Growth of the Child," a summary report of the third Texas Conference on Physicians and Schools which was held in Dallas, April 4, has just been published. It has been distributed to physicians, school administrators, principals, school nurses, counselors, certain teachers, key members of the parent-teachers associations, ministers, and representatives of civic groups primarily concerned with the welfare of the child.

The Texas Medical Association's Committee on School Health sponsored the conference in cooperation with the Dallas Independent School District.

Any interested physician may obtain a pamphlet by writing to Mr. Ken Knopp, Texas Medical Association, 1801 North Lamar, Austin.

Postgraduate Assembly in California

The fourteenth Annual Postgraduate Assembly sponsored by the San Diego County General Hospital will be held November 2 and 3 at the County Hospital in San Diego, Calif.

Sections will be held on chest, medicine, obstetrics-gynecology, orthopedics, pediatrics, surgery, and urology.

Further information may be received from the registrar, William Tisdale, M.D., in care of the San Diego County General Hospital, San Diego 3.

HELP Program Set for Residents

The American College of Obstetricians and Gynecologists has set up a Higher Education Loan Program (HELP) to enable resident physicians to complete their training in obstetrics and gynecology. Loans up to $5,000 will be made to help doctors through their specialty training period and early practice. Further information may be requested from Donald F. Richardson, executive secretary of the organization, 79 West Monroe Street, Chicago 3.

Povan Is Effective Drug For Pinworm Infestation

POVAN (Pyrvinium Pamoate, Parke-Davis and Company), a new anthelmintic which now is commercially available, is a red dye that is so effective a single dose may rid a person of pinworm infestation.

Development of this new drug is a major contribution to the armamentarium of the physician. Although dyes, such as gentian violet, have been used for some time, these older dyes exert a number of undesirable side-effects; namely, nausea and vomiting, and other gastrointestinal disorders. Introduction of Piperazine (Antepar, Burroughs-Wellcome) was a major development in the early 1950's. However, experimental observations have shown that this compound is effective only against fully matured pinworms.

Povan is related to Vanquin (Pyrvinium Chloride, Parke-Davis and Company). Both possess the *amidinium ion system* (believed to be responsible for the activity) which is characteristic of the cyanine dyes. The difference is that Vanquin is the chloride salt, whereas Povan is the pamoate salt. Experimentation has demonstrated that the pamoate salt (Povan) is as effective against pinworms as the chloride salt (Vanquin), though less soluble. This low solubility of Povan is advantageous since the drug can get to the worms lodged in the intestines without being absorbed into the bloodstream of the host. Consequently, Povan exerts fewer side-effects and greater effectiveness. From the standpoint of pharmaceutical development, this low solubility may facilitate formulation since the compound may be incorporated into a pleasant tasting preparation. The case of Povan illustrates the fact that physico-chemical properties contribute to the effectiveness of therapeutic agents, as well as the actual activity of the compound.

Recommended administration of Povan is a single oral dose equivalent to 5 mg. of the base per kilogram of body weight. Systemic toxicity has not been a problem at these dosage levels. Vomiting may occur with larger doses. The drug is indicated in pinworm infestation (Enterobius vermicularis) of children and adults.

B.W.-58-232 [4, 6-diamino-1-(p-chlorophenyl)-1, 2-dihydro-2, 2-(3′-methylpentamethylene)-s-triazine Hydrochloride; Burroughs-Wellcome and Company, Inc.] is a member of a series of dihydrotriazines which are also highly effective in pinworm infestations. This new compound, currently under clinical investigation, is relatively nontoxic. In fact, toxicity is so low that it has been impossible to feed mice enough to kill them: The development of these two new anthelmintics may "signal the end of pinworms as a public health problem" (Chem. and Eng. News, April 18, 1960).

The *New and Non-official Drugs of 1960* lists the following vermifugal agents: diethyl carbamazine citrate (Hetrazan, Lederle) introduced in 1949; piperazine citrate (Antepar, Burroughs-Wellcome) introduced in 1953; piperazine calcium edathamil (Perin, Endo) introduced in 1954; piperazine tartrate (Piperat, Lincoln) introduced in 1954; dithiazinine iodide (Abminthic, Pfizer) introduced in 1958 and also commercially available as Delvex by Eli Lilly and Company.

The development of effective anthelmintics has been a problem for a number of reasons. Of major consideration is the fact that the effectiveness of these agents depends on numerous and diversified factors. Above all, an ideal anthelmintic must exhibit a wide margin between the dose necessary to effectively eradicate the parasitic worms and the dose toxic to the host. As in all forms of chemo-therapy, the principle of "selective toxicity" serves as the principal basis for research.

Research also has been directed toward elucidation of the mechanism of action of anthelmintics. Logically, if mode of action is understood, the search for more effective and ideal anthelmintics will be conducted on a sounder basis. Many studies have shown outstanding indications. Nevertheless, it is difficult to define the action of most anthelmintics an unequivocal statement. Bach and Kushner of Lederle Research Laboratories (in Burger's *Medicinal Chemistry*, Second Edition, 1960) state that the effectiveness of many anthelmintics is attributable to one of the following modes of action: narcosis, paralysis or death of the parasite causing its elimination; irritation or burning of the worm tissue; digestion of the helminth by a proteolytic agent; and disturbance of the worm tissue by a chemical agent causing it to migrate and subsequently to be destroyed. Consequently, the physiology of the parasitic worm is another important consideration in the development of effective anthelmintics.

Outline of Anthelmintics

Bach and Kushner have categorized most anthelmintics on the basis of the following chemical classification:

I. Chlorinated Hydrocarbons: For example, tetrachloroethylene, U.S.P., which has been used extensively and which is considered one of the most effective anthelmintics of this group. It is effective against intestinal flukes in humans, hookworm infestations in animals and man, and Trichostronylus in cattle. This chlorinated hydrocarbon is not considered ideal because of its toxicity to liver tissue.

II. Phenols: For example, hexylresorcinol, U.S.P., has been used as an anthelmintic for ascaris and hookworm.

III. Antimonials and Arsenicals: ethylstibamine, U.S.P., A.D.I., N.N.D., 1950, and other similar preparations have been used in filiariasis.

IV. Piperazine Derivatives: For example, Antepar (Piperazine Citrate, Burroughs-Wellcome) is a classical illustration of this category.

V. Triphenylmethane Dyes: Gentian violet is a classical illustration.

VI. Cyanine Dyes: For example, Povan and Vanquin.

VII. Xanthones and Thiaxanthones: Members of this class have been studied. In spite of the fact that they are active, they are not well tolerated.

VIII. Deoxybenzoins: A number of these compounds bearing an isosteric relationship to the preceding group are still under investigation.

IX. Symmetrical Diaminodiphenoxyalkanes: A number of active compounds in this class are receiving the attention of clinicians.

X. Antimalarials as anthelmintics: quinacrine (U.S.P. and N.N.D.; Atabrine, Winthrop-Stearns) are classical examples of this category, which has received attention because of activity against T. saginata.

XI. Phenothiazine and Related Compounds: Phenothiazine has been used extensively as an anthelmintic. It is one of the most important anthelmintics for food-producing

animals, because of its wide range of activity and inexpensiveness. Phenothiazine has shown activity in humans against pinworms and roundworm infestation, but is far from being the drug of choice.

XII. Miscellaneous Natural Products: Certain antibiotics have been used successfully in this capacity: Neomycin, Bacitracin, certain Tetracyclines, Chloroamphenicol, and others. (Two possible explanations for the anthelmintic activity of the antibiotics have been proposed: reduction of intestinal flora which may serve as nutrient material for the parasitic worms and possible direct toxic action on the parasite.)

Santonin, a natural product obtained from certain Artemisia plants, has been recognized as an anthelmintic for some time. It has been used extensively abroad. Oil of Chenopodium is another classical natural product with potent anthelmintic properties. This oil exhibits a narrow margin of safety, hence has had limited use. Other well known natural products that have shown activity as anthelmintics are Aspidium Oleoresin, Emetine, and Ficin (a proteolytic enzyme which occurs in the latex of certain tropical plants).

A review of this outline reveals the diversified nature of anthelmintics. This review also should facilitate the organization of those anthelmintics currently in extensive use. Povan and Vanquin have been classified as *Cyanine Dyes.* In contrast, B.W.-58-232, the Dihydrotriazine, represents a new class of anthelmintics. This dihydrotriazine derivative was developed during an investigation of dihydropyrimidines as potential antimalarials, during which a series of corresponding dihydrotriazines were synthesized for comparative testing. Certain of these dihydrotriazines were inactive as antimalarials, but demonstrated a high degree of anthelmintic activity. Among these was B.W.-58-232.

—JAIME N. DELGADO, Ph.D., Austin.

OF GENERAL INTEREST

Personals

Dr. Grover L. Bynum, who has been a fellow in internal medicine at the Mayo Foundation in Rochester, Minn., will be located in Austin, and *Dr. Stanley Berman,* who has been a fellow in surgery at the same institution, will move to Houston.

Mrs. Seale T. Cutbirth, wife of a Brownwood physician, was named Mrs. Texas at Fort Worth in June.

Three physicians, *Drs. H. F. Avery, John Dunn,* and *Charles Sullivan,* recently purchased the Pecos newspaper, *Pecos Enterprise,* changing its name to the *Pecos Independent and Enterprise.*

Dr. John A. Webb recently was appointed assistant professor of pathology at the University of Texas Medical Branch, Galveston.

Recently reelected as president of the Amarillo-Potter County Heart Association was *Dr. H. H. Latson* of Amarillo. Serving again as medical advisor is *Dr. Horace Wolf* of Amarillo.

Dr. and Mrs. A. J. Streit of Amarillo began a trip through the Far East on August 1. They plan to visit Japan, Hong Kong, Manila, and Hawaii, where they expect to attend the Pan-Pacific Surgical Society. In October they will attend the American College of Surgeons meeting in San Francisco on their way home.

Dr. John H. Vaughan of Amarillo has retired from active service after 51 years of medical practice in Texas.

Dr. James R. Maxfield, Jr., Dallas, was named vice president-elect of the society of Nuclear Medicine at the organization's national meeting in Estes Park, Colo., recently.

Dr. Glenn Drager, neurologist, joined the staff of The University of Texas Medical Branch at Galveston as associate professor in the Department of Neurology and Psychiatry on September 1. Since 1959, Dr. Drager has been associate professor of neurology at Baylor University College of Medicine, Houston.

Weekly Television Program Scheduled for Physicians

October 30 marks the initiation of a new weekly review of medical news for physicians over nationwide commercial television channels.

"This Week in Medicine," a 15 minute program, will be broadcast on Sunday afternoons. Each program will include a worldwide summary of medical news and a filmed feature on some aspect of research, clinical medicine, or surgery. This will be the first time regular television channels will have been used to reach a nationwide medical audience on a professional level.

Produced by the editorial staff and medical consultants of Medical News, Inc., the series will be sponsored by CIBA Pharmaceutical Products, Inc.

Tests in Dallas, Kansas City, Miami, and Binghamton showed that even though the program could be seen by the public over regular channels, the technical language and subject matter limited the audience to physicians and members of allied health professions.

FAA Revises Vision Tests

Existing standards for diplopia, depth perception, abduction, and adduction have been rescinded from the Civil Air Regulations in a recent amendment.

Vision standards and vision testing procedures recently were reviewed by the Bureau of Aviation Medicine, which found that present tests for depth perception, diplopia prism convergence, and prism divergence do not satisfactorily provide the information needed to assess the visual proficiency of airmen. It was found that limiting values for the tests have seldom served as the basis for disqualification, despite their existence.

Vision standards which more accurately limit disqualification to applicants with significant alterations of eye muscle balance have been proposed.

Urologists Offer Award

The American Urological Association has announced its annual Urology Award for essays on the result of clinical or laboratory research in urology. Competition is limited to urologists who have been graduated not more than 10 years, and to hospital interns and residents doing research work in urology.

The first prize essay will appear on the program of the American Urological Association at Los Angeles, May 22-25, 1961. First prize is $500, second is $300, and third is $200. Further information may be obtained from William P. Didusch, Executive Secretary, 1120 North Charles Street, Baltimore.

Frozen Blood Method Is Proved Reliable

A group of researchers at the United States Navy Hospital, Chelsea, Mass., have proved a deep-freeze method of preserving human blood for 4 years to be safe, reliable, and workable.

Begun at the hospital in 1956 under joint supervision of the Department of the Navy and the Protein Foundation, Boston, the experiment was based on the theory that glycerol, an alcohol, could prevent the damaging formation of ice crystals in red blood cells during freezing and thawing. The Cohn fractionator, a machine developed in 1951 to separate blood into its component parts, was used to add the glycerol to the blood cells and to remove it after frozen storage.

The glycerolized blood cells were stored in three deep-freeze lockers, two at —80 degrees C. and the other at —120 degrees C. After storage, the cells were reprocessed into reconstituted whole blood or other liquid form for transfusions and placed under ordinary refrigeration.

An "exceptionally low" rate of unpleasant reactions among recipients was noted—the overall incidence of reactions was ten times less than the general reaction rate for conventionally processed whole blood. The incidence of hepatitis was reduced, and separation of the blood into its component parts made it possible to tailor content of transfusions to the needs of individual patients.

Government Distributes Books On Health, Education, Welfare

Two documents prepared annually by the Department of Health, Education, and Welfare are available to the public for the first time. They are "Programs of the U.S. Department of Health, Education, and Welfare" and "Health, Education, and Welfare Trends."

The first volume contains information about the program objectives of each major unit of the department and about the extent of the problem toward which the program is directed, its legal basis, and related information. The second contains convenient reference social data on many subjects. Its purpose is to aid in the understanding of national developments in health, education, and welfare and to help in analysis of current and emerging problems.

Copies are available from the United States Government Printing Office, Division of Public Documents, Washington 25, D. C.

Commission on Patient Care Elects

Dr. G. V. Brindley, Jr., Temple, was reelected chairman of the Texas Commission on Patient Care at a recent meeting in Austin.

Others named were W. P. Earngey, Jr. of Harris Hospital, Fort Worth, vice chairman; and Dr. Joseph F. McVeigh, Fort Worth, secretary-treasurer.

Health Insurance Pamphlet Available

Doctors may order quantities of a new booklet on health insurance entitled, "Let's Use, Not Abuse Health Insurance," from the Texas Medical Association central office at 1801 North Lamar Boulevard, Austin. The publication is provided by the American Medical Association.

County Society Cooperation With National Foundation Outlined

The American Medical Association House of Delegates at the 1960 annual session passed a resolution urging county medical societies to cooperate with the National Foundation. This organization is concerned with poliomyelitis, viral diseases, arthritis, congenital defects, and central nervous system disorders.

The AMA recommended that members of the medical advisory committee to a local chapter be selected from names furnished by the component medical society and that the committee supply a detailed report on its actions to the society at least once annually.

In addition, the following basic principles were recommended:

1. The committee chairman should automatically be a member of the local Foundation chapter.

2. Expenditure of local chapter funds for medical care and professional education should be approved by the medical advisory committee. The committee should determine extent and degree of eligibility for financial assistance for medical care, and in economically borderline cases should determine to what extent the local chapter may assist in payment of paramedical services.

3. The Foundation should make no payment for physician's services, except as outlined in its memorandum (The Chapter Medical Advisory Committee) dated August, 1959. Fees for physician's services will be arranged privately between physician and patient.

4. Each chapter which extends aid to patients receiving professional medical or surgical service should conform to policies of the advisory committee in the community in which treatment is rendered.

5. Physicians who agree to serve on advisory committees should be aware of the responsibilities of such positions, and should offer constructive leadership.

Basic Sciences Examination Scheduled for October 17-18

October 17 and 18, 1960, have been designated as dates for the next examination of the Texas State Board of Examiners in the Basic Sciences.

Applications for the October examinations will not be accepted after October 5, and all necessary information and documents required by the board must be completed and in the applicant's file by that date.

Individuals interested in participating may obtain details of time and place by writing to the Executive Secretary, The Texas State Board of Examiners in the Basic Sciences, 201 East 14th Street, Austin.

Nursing College Names Instructors

Two instructors recently appointed to the faculty of the College of Nursing of Texas Woman's University at Houston are Mrs. Lorraine Alvis of Houston, formerly an instructor at Methodist Hospital School of Nursing, and Miss Joanne Steinberger of Springfield, Ohio.

The College of Nursing, located at Texas Medical Center, was scheduled to open September 14, with a class of 50 students. Mrs. Kathryn Crossland, Associate Dean, is director.

Insurance Forms to Include Authorization to Pay Statement

To be included on the back of the revised printing of the all-purpose single insurance form developed by the Health Insurance Council is an "Authorization to Pay" statement.

Physicians who have the current forms may have the statement typed on the back of the form if they so wish. It reads as follows:

AUTHORIZATION TO PAY

*I*_____*hereby authorize*_____
(Name of Insured) *(Name of Company)*

*to pay directly to*_____*the surgical and/or medical benefits, if any, otherwise payable to me for his services as described on the reverse side hereof, but not to exceed the charges for those services. I understand that I am financially responsible for those charges not paid by my insurance.*
(Name of Physician)

*Date*_____ *Signed*_____

The all-purpose forms are to be used in lieu of insurance company forms which do not comply with the simplified claim forms approved by the Health Insurance Council and the American Medical Association's Council on Medical Service.

The Steck Company at Austin is printing and stocking the form, designated as No. COMB-1.

Health Insurance Figures Increase

Latest figures from the Health Insurance Council show that 5,271,000 Texans held health insurance during 1959, a 4.5 per cent increase over 1958.

Number of persons with surgical expense insurance climbed from 4,876,000 at the end of 1958 to 4,997,000 at the end of last year. Persons protected by regular medical expense insurance which helps pay for physicians' visits for non-surgical care, increased from 3,066,000 to 3,211,000.

Alcoholic Study Grants Slated

A new grant-in-aid program, through which relatively small research grants may be arranged quickly for competent scientists working in the field of alcoholism and related subjects, has been announced by the Scientific Advisory Committee of Licensed Beverage Industries, Inc.

The program is made possible through a grant of $500,000 over a 5 year period. It is to be administered by the Scientific Advisory Committee, which includes members representing a wide range of relevant disciplines. Physicians among them are Dr. J. D. McCarthy, professor of medicine, Nebraska University College of Medicine, and Dr. Jackson A. Smith, clinical director, Illinois State Psychiatric Institute, Chicago.

Not intended to replace support from governmental agencies, private foundations, or other sources, the grants will be awarded to qualified researchers, including young scientists in the biological and behavioral sciences, who wish to make preliminary or pilot studies for the purpose of raising or clarifying promising hypotheses. Grants will range from $2,000 to $10,000 for 1 year.

Application forms and detailed information may be obtained from the Scientific Advisory Committee, Licensed Beverage Industries, Inc., 155 East 44th Street, New York 17.

Venereal Disease Pamphlet

"Venereal Disease . . . Old Plague—New Challenge" is the title of a pamphlet just released by the Public Affairs Committee, Inc., New York. Primarily concerned with the increase of venereal disease among teen-agers in many parts of the country, the new booklet explains details on the nature of the new hazard, its causes, and what is being done to meet the challenge.

Author of the pamphlet, T. Lefoy Richman, associate director of the American Social Health Association, has declared that "the teen-ager has come more prominently into the special VD problem group; sexual behavior is becoming more casual among many groups; and that the prostitute is being widely displaced as a spreader of venereal disease." Annual infected population in the United States under 20 years of age is estimated at 200,000. However, fewer than 50,000 of these are reported in a year.

To combat the lack of detection of the disease, a new kind of health worker—the venereal disease investigator—has been employed to search out and talk to sex contacts of VD patients in bars, taverns, bawdy houses, street corners, and alleys.

"Although the private physician has always figured prominently in VD thinking," adds Mr. Richman, "he had never really become a part of the control team in any significant, nationwide effort. The new program has two major objectives for private physician participation: an increase in reporting from the present 25 per cent to 100 per cent; and an increase in interviews from the present 25 per cent to 100 per cent of those reported."

Mr. Richman also emphasizes the importance of early family teaching regarding the pitfalls of the disease.

Booklets may be obtained by addressing the Public Affairs Committee, a nonprofit educational organization, at 22 East 38th Street, New York. Cost is 25 cents.

Houston Home for Aged Marks Sixtieth Anniversary

In October, St. Anthony's Home for the Aged, 6301 Almeda Road, Houston, commemorates 60 years of service to the aged. The oldest institution of its kind in the city, it is operated by the Sisters of Charity of the Incarnate Word. Present occupancy is 64 guests. Minimal age for admission is 65 years; average age of applicants is 80 years, 2 months. The oldest resident was 101 years old this past summer.

New Medical Library in Bexar

The old medical library in San Antonio, the meeting place for approximately 30 years of the Bexar County Medical Society, is being torn down this month.

It is to be replaced by the new medical library building. Construction should be started about November 1, Dr. O. Roger Hollan, chairman of the building committee, announced.

MEMORIAL LIBRARY

MEDICAL BIOGRAPHY

Blunt, Reputedly Arrogant as a Teacher, Thomas Addison Showed Inner Humility

A great name in medicine, Thomas Addison, has appeared repeatedly on the front pages of our newspapers. He was one of the "four greats" of Guy's Hospital in London. He, and the other three—Richard Bright, Thomas Hodgkin, and Astley Cooper—left their names indelibly imprinted upon the practice of medicine. Each was a man of genius in his own right, yet each was different in his approach to the practice of medicine.

Thomas Addison (1795-1860) holds a unique place in medical history as the discoverer of two diseases, both named after him—Addison's anemia (pernicious anemia) and Addison's disease (adrenal insufficiency usually attributable to tuberculosis of the adrenal glands).

Born of humble parents near Newcastle, England, in 1795 (as entered in the Baptismal Register of Long Benton Church), Addison was the son of a grocer. It was intended for him to study law, but he chose medicine as a career. Medical students usually were apprenticed to a surgeon or apothecary, but Addison went straight to Edinburgh University to begin his medical studies. He graduated in 1815 and soon decided to go to London. Although he had already graduated with his medical degree, he entered Guy's Hospital as an ordinary student, slowly climbing until he became a member of the honorary staff. He was the first lecturer on diseases of the skin at Guy's thus establishing the department of dermatology.

Addison lacked the cheer and charm of his contemporary, Richard Bright. He was blunt and had a reputation of being haughty and arrogant. He confessed in later years that he never rose to speak to the students "without feeling nervous," but his listeners would depart with the feeling that he had spoken in an arrogant manner with a tone of bluster.

In 1850, in "Guy's Hospital Reports," Addison published the first description of xanthoma diabeticorum.

Addison did not marry until he was 52 years old. Just before the ceremony, unknown to the wedding party, a storm blew part of the church roof down upon the altar. The fact was not discovered until the procession entered the church.

"Good God," exclaimed Addison, "is this not ominous?"

It was not. Addison survived his wedding 13 years.

As a teacher of clinical medicine, Addison was in his element. His students feared rather than loved him; nevertheless, they accepted as gospel every word that he uttered.

It has been written that Addison had another characteristic:

"He has been known, after seeing a patient within the radius of eight or ten miles, to remember on his near approach to London, thinking over the case on his way, that he had omitted some seemingly important inquiry, and so to have posted back some miles for the purpose of satisfying his mind on the doubt which had occurred to it." (I am glad that we now have telephones, although at times they seem to have their disadvantages!)

Addison and Richard Bright wrote an excellent book on practical medicine. Addison also devoted a great deal of attention to diseases of the lungs. His writings on pneumonia were original and excellent.

On March 15, 1849, Addison read a paper before the South London Medical Society entitled "A Remarkable Form of Anemia." In 3 cases autopsies had been performed, and in all 3 bilateral disease of the adrenals were found. No mention at this time was made of pigmentation of the skin. Nevertheless, the paper is of historical importance, for it showed that the adrenal glands are essential to life. It has even been said that the whole of endocrinology dates from March 15, 1849.

In 1855 Addison published his famous book on "Diseases of the Adrenal Glands," which expanded and clarified his earlier accounts of what is now known as Addison's disease. The name "Addison's Disease" was given to the symptom complex by the French physician, Armand Trousseau, when the importance of the endocrine glands in physiology was better understood. Addison also discovered another disease, now known as pernicious anemia, or Addison's anemia. As Addison himself stated, it was while investigating "his anemia that he stumbled upon his disease."

Only a few passages from "On the Constitutional and Local Effects of Disease of the Supra-renal capsules" (1855) will be given, but the complete text with case histories makes excellent reading.

"It will hardly be disputed that at the present moment," Addison said, "the functions of the suprarenal capsules, and the influence they exercise in the general economy, are almost or altogether unknown. The large supply of blood, which they receive from three separate sources; their numerous nerves, derived immediately from the semilunar ganglia and solar plexus; their early development in the foetus; their unimpaired integrity to the latest period of life; and their peculiar gland-like structure—all point to the performance of some important office: nevertheless, beyond an ill-defined impression, founded on a consideration of their ultimate organization, that, in common with the spleen, thymus, and thyroid body, they in some way or other minister to the elaboration of the blood, I am not aware that any modern authority has ventured to assign to them any special function or influence whatever."

"The leading and characteristic features of the morbid state to which I would direct attention are, anemia, general languor and debility, remarkable feebleness of the heart's action, irritability of the stomach, and a peculiar change of color in the skin, occurring in connection with a diseased condition of the 'supra-renal capsules.'"

Although Addison's disease is usually the result of tuberculosis of the suprarenal glands and, rarely, some other dis-

ease such as malignant tumor or atrophy of undetermined cause is causative. Addison's 11 cases included some of the rarities.

Always of retiring nature, in 1860 Addison developed "melancholia" and retired to Brighton, where he died 3 months later. Early in his career, Addison's private practice was small, but it advanced slowly and at his death he was worth about $180,000.

His death was hardly noticed by his contemporaries. Only one paper, *The Medical Times and Gazette,* considered it worthwhile to publish an obituary.

Addison was buried at Lanercost, Cumberland, the home of his forefathers. The grave is situated in a quiet spot under an old yew tree, surrounded by rows of tombstones erected to many other Addisons of bygone times but none other so well known and admired.

—William M. Crawford, M.D., Fort Worth,
Chairman, Committee on Medical History.

1. Bailey, H., and Bishop, W. J.: Notable Names in Medicine and Surgery, Springfield, Ill., Charles C Thomas (1959).
2. Long, E. R.: Selected Readings in Pathology, Springfield, Ill., Charles C Thomas (1929).
3. Major, R. H.: Classic Descriptions of Disease, Springfield, Ill., Charles C Thomas (1945).

★ Books

Books Newly Acquired

Academy of Science, USSR, *Institute of Higher Nervous Activity Pathophysiological Series:* vol. 2-3, Moscow, 1956-1957.

Anderson, C. L.: *School Health Practice,* ed. 2, St. Louis, C. V. Mosby, 1960.

Bartter, F. C.: *The Clinical Use of Aldosterone Antagonists,* Springfield, Ill., Charles C Thomas, 1960.

Black, D. A. K.: *Essentials of Fluid Balance,* ed. 2, Springfield, Ill., Charles C Thomas, 1960.

Clark, R. L., Jr., and Cumley, R. W.: *Year Book of Cancer, 1959-60,* Chicago, Year Book Publishers, 1960.

Cohn, I.: *Rudolph Matas,* Garden City, Doubleday, 1960.

Douthwaite, A. H., ed.: *French's Index to Differential Diagnosis,* ed. 8, Baltimore, Williams and Wilkins, 1960.

Glasser, O.: *Medical Physics,* vol. 3, Chicago, Year Book Publishers, 1960.

Haag, J. H.: *School Health Program,* New York, Henry Holt, 1958.

Hsia, D. Yi-Yung: *Inborn Errors of Metabolism,* Chicago, Year Book Publishers, 1959.

Litchfield, H. R., and Bemno, L. H.: *Your Child's Care,* revised, Garden City, Doubleday, 1960.

Luisada, A. A.: *Cardiology, An Encyclopedia of the Cardiovascular System,* vol. 1-4, New York, McGraw-Hill, 1959.

Schaffer, A. J.: *Diseases of the Newborn,* Philadelphia, W. B. Saunders, 1960.

Schmorl, G., and Junghanns, H.: *Human Spine in Health and Disease,* New York, Grune & Stratton, 1959.

Stead, E., and Warren, G. K.: *Low-fat Cookery,* revised, New York, McGraw-Hill, 1959.

Tocantins, L. M.: *Coagulation of Blood, Methods of Study,* New York, Grune & Stratton, 1955.

Thoms, H.: *Our Obstetric Heritage; The Story of Safe Childbirth,* Hamden, Conn., Shoe String Press, 1960.

Turner, C. E.; Sellery, C. M.; and Smith, S. L.: *School Health and Health Education,* ed. 3, St. Louis, C. V. Mosby, 1957.

U. S. Army, Brooke Army Medical Center Surgical Research Unit, Fort Sam Houston: *Research Reports, Traumatic Surgery and Shock; Radiation and Thermal Burns,* 1960.

Gifts to the Library

Dr. Mathis W. Blackstock, Austin, 49 journals.
Dr. George E. Clark, Austin, 119 journals.
Dr. Kermit W. Fox, Austin, 5 books.
Dr. George R. Herrmann, Galveston, 2 books.
Dr. Maurice Jacobs, Austin, 3 journals.
Dr. J. Edward Johnson, Austin, 6 journals, 3 reprints.
Dr. Georgia F. Legett, Austin, 48 journals.
Dr. Robert G. McCorkle, Austin, 5 journals.
Dr. Berthold H. Reinarz, Austin, 57 journals.
Dr. Nelson L. Schiller, Austin, 142 journals.
Dr. David R. Womack, Austin, 45 journals.

Book Notes

The Emergency Syndromes In Pediatric Practice

ALFRED J. VIGNEC, M.D., Clinical Professor of Pediatrics, New York University College of Medicine, New York, N. Y.; Medical Director and Pediatrician in Chief, New York Foundling Hospital, New York, N. Y.; Director of Pediatric Division, St. Vincent's Hospital, New York, N.Y. 371 pages. $9. New York, Landsberger Medical Books, Inc., 1959.

This book deserves a more descriptive title. It is intended to assist the physician in the management of acutely ill children rather than be a complete pediatric text or first aid book.

There are chapters on conditions of each of the organ systems and additional chapters on metabolic disorders, steroids, poisons, allergic conditions, and the premature infant. Certain disease states are discussed completely; whereas, others are covered superficially. Emphasis is strongly placed on clinical observations with little attention to laboratory data and none to experimental data. References are taken from standard texts and articles from commonly available medical journals.

Some of the clinical observations and descriptions are outstanding. The author relates anecdotes of clinical experience which add to the informality of the book yet are of instructional nature. The treatment regimes are clearly stated and are generally up-to-date.

The criticisms the reviewer offers would not significantly affect the management of the conditions discussed; however, they are as follows: aortic atresia is not mentioned as a cause of congestive heart failure occurring in the neonate. Hemadsorption, adeno, and CA virus are not listed as causes of non-specific infectious laryngitis. No mention is made of supraglottic allergic edema in the discussion of laryngeal obstruction. Undue emphasis is placed on the use of steroids in the management of asthma, eczema, and contact dermatitis. Undue emphasis is placed on the use of the E.E.G. in the management of convulsive disorders. Meningitis and its management is not discussed. Shortcomings of the discussion on favism and diabetic acidosis do not limit the early management of such conditions but they do not contribute to an understanding of the metabolic derangements in such states. In the discussion of the management of acute glomerulo-nephritis, little attention is paid to the use of the newer anti-hypertensive agents. In the management of the premature infant no

mention is made regarding high dosage of vitamin K and sulfonamides as causes of kernicterus.

This is a worthwhile book. Obviously an observant clinician of wide experience, Dr. Vignec presents a convenient and brief survey of the diagnosis and management of conditions commonly encountered and mentions briefly conditions uncommonly encountered in the acutely ill child. This book should be welcomed by the busy pediatrician as well as by the general practitioner.

—Stanton J. Barron, M.D., Abilene.

Textbook of Surgery

WARREN H. COLE, M.D., Professor and Head of the Department of Surgery, University of Illinois College of Medicine; Chief Surgeon, Illinois Research and Educational Hospitals, Chicago. 1,224 pages. $17. New York, Appleton-Century-Crofts, Inc., 1959.

The seventh edition of Dr. Cole's book remains a standard text for medical students, house officers, and practitioners of surgery. It has 43 chapters. More than 50 contributors have written for this book, most of whom are heads of departments in medical schools or recognized authorities in their various fields. Dr. Cole, as editor, has wisely eliminated most references to surgical technique and has tried to convey basic principles on surgery and basic ideas of various disease entities. Highly commendable features are the first chapter on medical history and the last chapter on medical ethics and conduct.

The book is well written, concise, and clearly illustrated. Unfortunately, as in many texts, several old illustrations used year after year have been included. Excellent sections are devoted to basic surgical principles including the use of fluids, reaction to trauma, shock, wounds and wound healing, infection, laboratory aids, and bacteriology. Two chapters on vascular and cardiac surgery are contributed by a Houston group of physicians.

Necessarily, a textbook must be concise and positive. Many questionable or unproved subjects must be eliminated, and this practice has been followed. This volume is highly recommended for all associated with surgery. It should continue to be one of our standard authorities.

—William Klingensmith, M.D., Amarillo.

The Surgical Treatment of Scoliosis

LOUIS A. GOLDSTEIN, M.D., F.A.C.S., Associate Clinical Professor of Orthopedic Surgery, University of Rochester Medical Center, Associate Orthopedic Surgeon, Strong Memorial Hospital of the University of Rochester Medical Center, Consultant, Orthopedic Surgery, Genesee Hospital, Batavia, N. Y. 94 pages. $6.75. Springfield, Ill., Charles C Thomas, 1959.

Dr. Goldstein has outlined general treatment of patients with scoliosis. He mentions conservative therapy, and outlines in detail phases of surgical correction.

The author discusses the basic problems associated with classification of curvatures, then projects prognosis on the basis of type of scoliosis. Statistics and references are given for preoperative analysis and correction before surgical intervention. Techniques of surgery are outlined, and postoperative management of the patient is discussed.

The author presents a series of 51 personal cases, illustrations of types of curves, and basis of prognosis in each case. He analyzes his case results in relation to etiology and curve patterns, giving examples of each.

I think that this monograph would be used in teaching programs. It represents an excellent summary and statistical analysis of the surgical treatment of patients with various types and patterns of scoliosis.

The appendix of the monograph by D. Vernon Thomas, M.B., F.F.A.R.C.S., is on important considerations in anesthesia. He offers an excellent discussion of problems which the surgeon should anticipate to assure satisfactory anesthesia with minimal hazard.

—C. E. Ratcliff, M.D., Lubbock.

Home Medical Encyclopedia

(Former title: Medicine for the Layman) PAUL KUHNE, M.D. Translated from German by Jean Cunningham, Adapted for American readers with an introduction by DONALD G. COOLEY, editor of *Your Life*, and *Your Health* magazines. 404 pages. 50 cents. Greenwich, Conn., Fawcett Publications, Inc., 1960.

This is a small paperback book which is authoritative, readable and up-to-date. It is a guide to basic principles of good health and nutrition, and easy for travelers to carry and for families to replace.

Schifferes' Family Medical Encyclopedia

JUSTUS J. SCHIEFFERES, Ph.D., Director, Health Education Council; formerly medical editor, National Foundation for Infantile Paralysis, associate in hygiene, Columbia University, managing editor, Modern Medicine. 602 pages. 50 cents. New York, Permabooks, 1959.

I Prescribe Laughter

THOMAS RICHARD REES, M.D. 111 pages. $2.75. New York, Vantage Press, 1960.

★ American Medical Association

AMA Meeting Film Available

Highlights of the American Medical Association's 1960 annual meeting in Miami Beach may be viewed on film by interested state and county medical societies.

Schering Corporation, in cooperation with the AMA's Department of Medical Motion Pictures and Television, has made the 33-minute, black and white sound film available. Host-narrator is Dr. Ralph Jones, Jr. of the Dade County (Florida) Medical Society, a professor of medicine at the University of Miami.

The feature, Medifilm Report II, may be obtained by writing to the American Medical Association, 535 North Dearborn St., Chicago 10, or to the Audio-Visual Department, Schering Corporation, Union, N. J.

★ Woman's Auxiliary

Woman's Auxiliary Sells Christmas Cards for AMEF

The Woman's Auxiliary is again sponsoring a Christmas card sale to benefit the American Medical Education Foundation. This year's card, which pictures the Texas Medical Association headquarters building in color, is printed on stock of excellent quality.

The price is $2.50 per box of 25 cards. Those who want to order cards should write to Mrs. Ben H. Griffin, Frost, enclosing a check or money order for the total number desired.

Outdoor Hobbies, Inside Warmth Typify Dr. Tate Miller, 1948 TMA President

"ON A LOT OF patients we cannot make the correct diagnosis. Some we diagnose we cannot cure. But there is never a time in the practice of medicine that you can't be kind to a sick man."

This is the philosophy of big, bluff Dr. Tate Miller, Dallas, who became eighty-third president of the Texas Medical Association during the 1948 annual session held in Houston. He had just served the usual year as president-elect. Before that, he had completed a 6-year tour of duty with the Navy during World War II, a conflict which saw him, eventually, as chief of medicine at Special Augmented Hospital No. 3 on Okinawa.

Not that Dr. Miller is given to bragging about his long-time Navy service (2½ years on active duty in World War I, 23 years in the active reserve with numerous training cruises). At the time of his election to the Association presidency, he admitted to having won a couple of ribbons for pistol and rifle prowess, but reflected that he was "the only Texas doctor with 31 years of Naval service who never received a commendation for anything!"

Born in Corsicana in 1892, Tate Miller was the third of 10 children in his family. His father, Dr. Thomas A. Miller, was a general practitioner.

After receiving a bachelor of literature degree from David Lipscomb College, Nashville, in 1911, Dr. Miller obtained his medical degree in 1915 from Vanderbilt University. He returned to Texas to intern in Dallas.

The story goes that when the young doctor completed his internship he called upon Dr. H. G. Walcott of Dallas, considered the Southwest's pioneer gastroenterologist. "I'm your new assistant, sir," he said.

"I can't afford an assistant," bristled Dr. Walcott.

"I didn't say anything about money, sir. I'm your assistant anyhow."

Only then did Dr. Walcott discover the identity of his brash caller: the son of his old friend, Dr. Thomas Miller.

The young man got his job—and $50 a month salary. The partnership lasted a long time, dissolved finally by Dr. Walcott's death in 1937. About the time Tate Miller acquired his first job, he also acquired a wife—the former Miss Emma Blythe of Lynchburg, Tenn. The two of them live in a Preston Hollow home with a beautiful garden area running down to a small lake in the back. Here Mrs. Miller raises flowers and her husband raises tomatoes, but the doctor is not the dedicated green-thumber he might be.

DR. TATE MILLER

"He's just a gardener until he finds four worms. Then he goes fishing," one neighbor has confided.

As the picture accompanying this article indicates, Dr. Miller's fishing techniques (strictly informal) have excellent results. He also likes to "hunt birds a little and mess around with bird-dogs."

The Millers have no children. But Dr. Miller is active in the Dallas Salesmanship Club, which supports projects to benefit underprivileged youngsters.

Both as president of the Texas Medical Association and in the years before and after, Dr. Miller has used his considerable speaking talent to fight for medical causes in which he believes. Himself a specialist (gastroenterology), he is a champion of the general practitioner: "You are the profession's brightest hope for winning back its lost standing in the hearts of the people," he once told members of the Texas Academy of General Practice.

As Association president he started a movement to give qualified Texas Negro doctors a better break, a result being the House of Delegates' appointment of a seven-man committee, including Dr. Miller, to work with the Lone Star State (Negro) Medical Association for reforms. In 1950, he sponsored the resolution to strike the "white" requirement from the membership section of the Constitution and By-Laws of the Texas Medical Association—a hope which was realized in 1955.

Dr. Miller has stumped the state in behalf of better rural medicine. He fought successfully for the Texas basic science bill, and he has often written and spoken against government-controlled medicine. When he accepted the Associa-

tion presidency, he advised his colleagues sternly that the time had come to "wade into politics belly-deep" before it was too late.

A natural leader, Dr. Miller has been president of the Dallas County Medical Society, the Dallas Physicians' Club, the Texas Society of Gastroenterologists and Proctologists, and chairman of the Southern Medical Association's Section on Gastroenterology. He is certified by the American Board of Internal Medicine and Gastroenterology—which doesn't prevent him from taking occasional cracks at what he considers an over-emphasis on the need for certification.

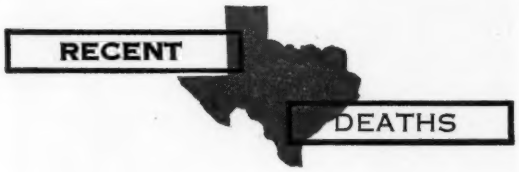
Dr. Miller has written a number of papers on his specialty. From 1916 until 1942, when the school was moved to Houston, he was a member of the faculty of Baylor University College of Medicine, and he lectured for years on dietetics and gastroenterology to Baylor University nursing students. He occupies a chair in clinical medicine in the Southwest Medical Foundation.

Today Dr. Miller is in partnership with Dr. William McCartney Hibbitts, with whom he shares an office in Dallas' Medical Arts Building. His associates and staff testify that he usually arrives at, and departs from, that office singing—in a voice which defies classification. His success as a speaker before medical and other groups has gained him the title, "the Will Rogers of Texas Medicine."

Of what is Tate Miller proudest among his medical achievements?

He does not hesitate over his answer. "Maintaining the loyalty and friendship of 12,000 out of 12,001 doctors I have known. Although many have disagreed with me on various issues, we are still friends . . ."

This is Dr. Tate Miller, to whom the practice of kindness goes along with the practice of medicine: another profile in leadership.



DR. H. E. NICHOLSON, JR.

A general practitioner from Wheeler, Dr. Harold Earl Nicholson, Jr., died May 31, 1960, at his home of a heart attack.

Born February 20, 1917, at Mobeetie, Dr. Nicholson was the son of a physician, Dr. H. E. Nicholson, Sr., of Wheeler, with whom he later practiced.

Dr. Nicholson undertook his preliminary education at Wheeler, graduating as valedictorian of his class. He received his bachelor of science degree from Texas A & M College, Bryan, in 1937, and was one of 13 honor graduates in a class of 600. Baylor University College of Medicine, then located in Dallas, awarded him his medical degree in 1942, and he served his internship at Shreveport Charity Hospital, in Louisiana.

Married October 9, 1954, to Miss Dorothy Dean Walton at Houston, he and his wife were parents of one son, H. E. Nicholson III. From 1943 until 1946 he served in the United States Army Medical Corps in the South Pacific, holding the rank of captain.

He was a fellow of the American Academy of General Practice, and he belonged to the American Medical Association, the Texas Medical Association, Armstrong-Donley-Childress-Collingsworth-Hall-Wheeler Counties Medical Society, and Phi Chi medical fraternity.

A Methodist, Dr. Nicholson was a Scottish Rite Mason and he belonged to the American Legion.

Survivors include his wife and son of Austin, and his parents, Dr. and Mrs. Nicholson, Sr., of Wheeler.

DR. H. E. NICHOLSON, JR.

DR. D. R. BABER

Dr. Dunbar Roy Baber, physician at Daingerfield since 1926, died on July 22, 1960, at his home.

A native of Marblehill, Ga., Dr. Baber was born January 15, 1896, the son of W. L. and Lilly (Reaves) Baber.

He attended The University of Texas at Austin and received his bachelor of science degree from the University of Oklahoma in 1923. The University of Arkansas School of Medicine awarded him his medical degree in 1925. Interning at Shreveport Charity Hospital, he served his residency at Baptist Hospital in Little Rock, Ark.

In 1953, he undertook postgraduate work from The University of Texas Medical Branch at Galveston. He had done research activity in malaria and hookworm, and he had written articles for the *Tri-State Journal*.

He was an honorary member of Texas Medical Association, and he belonged to the American Medical Association, and Camp-Morris-Titus Counties Medical Society. He had been county society president twice.

In addition, he was a member of the school board, the Lions Club, the Board of Stewards of the Methodist Church,

DR. D. R. BABER

and the Masons. He also was city-county health officer, and had served with the draft board.

Fishing and photography were his hobbies.

Survivors include his wife of Daingerfield; two brothers, W. L. Baber of Marshall and Lee Baber of Big Spring; and one sister, Mrs. Pauline Yelton, Dallas.

DR. O. V. LAWRENCE

Dr. O. V. Lawrence, a Brownsville physician for more than 50 years, died May 27, 1960, of a heart ailment and pneumonia. He had retired from practice because of ill health in January, 1957.

Dr. Lawrence, an eye, ear, nose and throat specialist, was born January 10, 1876, in Mansfield, the son of Oscar Jerome and Frances (Burroughs) Lawrence. He attended common school, passed the teachers' examination and taught school for 6 years before entering The University of Texas Medical Branch at Galveston, where he graduated in 1907. Serving his internship at Shreveport, La., he later went to Surgical Mining Camp near Monterrey, Mexico, and returned to practice briefly in Fort Worth and to study for his specialty at Chicago.

Active in civic work, Dr. Lawrence participated in public health work and was chairman of the local Red Cross chapter for several years. He served on the Brownsville Independent School Board for 25 years, from 1922 to 1947, and for 20 years was president of the board. For voluntary patriotic service during World War II, he was given the Selective Service medal.

Elected an honorary member of Texas Medical Association in 1959, Dr. Lawrence also was a member of the American Medical Association and of the Cameron-Willacy Counties Medical Society. He was at one time secretary of the Texas Medical Association Section on Eye, Ear, Nose, and Throat. He was on the medical staff of Mercy Hospital at Brownsville.

Survivors include his wife, the former Nancy Carr, whom he met and married in Monterrey, Mexico; two daughters, Mrs. Ivan Chauveaux of Claude and Mrs. Eric Lof of Elmhurst, Ill.; one son, O. V. Lawrence, Jr. of Roswell, N. M.; three sisters, Mrs. Harry Rudmose and Mrs. Aileen Brown, both of Fort Worth, and Mrs. W. M. Schofield of Lockhart; and six grandchildren.

DR. FERNANDO LUIS ARGUELLES

Dr. Fernando Luis Argüelles, El Paso, died June 11, 1960, in Providence Memorial Hospital in that city of a cerebral hemorrhage.

A native of Matamoros, Tamaulipas, Dr. Argüelles was the son of Camilo and Angela Lira Argüelles. He received his preliminiary education in Matamoros and was graduated May 9, 1905, from the University of Mexico School of Medicine. He served his internship and residency in Juarez, Chihuahua.

DR. O. V. LAWRENCE

DR. FERNANDO LUIS ARGUELLES

From 1906 until 1909, Dr. Argüelles was in private practice at Juarez and from 1910 until 1912 he was city health physician at Juarez. He had practiced in El Paso from 1912 until the time of his death.

Elected an honorary member of Texas Medical Association in 1950, Dr. Argüelles was also a member of the American Medical Association and of the El Paso County Medical Society.

He belonged to the Holy Family Catholic Church, the Union Catolica de San Jose, and the Logia Hispano Americano.

He was married December 22, 1910, in San Francisco, to Miss Mercedes Corella, who died August 8, 1953.

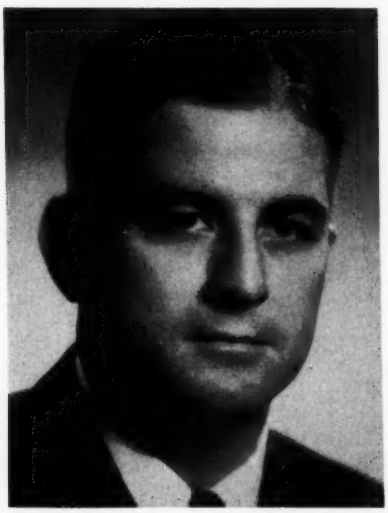
Survivors include his daughters, Mrs. Julieta Franco of El Paso, Mrs. Maria Luisa Grobet and Mrs. Mercedes Iturbe, both of Mexico City; three sisters, Mrs. Maria do los Angeles Huerta of Mexico City, Mrs. Eugenia Ortega of Monterrey, Nuevo Leon; and Mrs. Margarita Mejia Borja of Los Angeles; and a brother, Edmundo Argüelles of El Paso.

DR. M. L. JOHNSON

Dr. Malcolm Liddell Johnson, a Paris surgeon, died May 30, 1960, at his home. He had returned home from a hospital the day before.

Born October 31, 1910, at Blossom, Dr. Johnson is the son of Mrs. F. G. Johnson of Paris and the late Mr. Johnson. He was graduated from the Paris public schools in 1927. He attended the University of the South at Sewanee, Tenn.; The University of Texas at Austin, from which he received a bachelor of science degree; and The University of Texas Medical Branch at Galveston, from which he took his medical degree. From 1935 until 1937 he was house officer in surgery at Boston City Hospital.

Dr. Johnson was in military service 5½ years, serving as a surgeon at Brooke General Hospital, San Antonio, at the induction center at Denver, and at Camp Phillips, Kan. He was in the European Theater as chief surgeon with the 116th General Hospital in England, France, and in Germany. He held the rank of lieutenant colonel.



DR. M. L. JOHNSON

He was married in 1953 to Miss Margaret Louise Lewis, who now lives in Midland with their two children, Malcolm Liddell Johnson, Jr., and Lisa Johnson.

A specialist in bones and joints, Dr. Johnson was a member of the American Medical Association and the Texas Medical Association, with membership through the Lamar-Delta Counties Medical Society.

Survivors include his wife and two children; his mother of Paris; a sister, Mrs. B. O. Smith, Houston; and a brother, A. Sidney Johnson of Paris.

DR. J. L. DAWSON

Dr. Jesse Louis Dawson, honorary member of Texas Medical Association and Dallas general practitioner for many years, died July 4, 1960, at his home.

Born August 18, 1886, in Muenster, Dr. Dawson was the son of the late John C. Dawson, a former Cooke County commissioner. He was graduated from Myra High School.

He attended North Texas State College at Denton and taught school for several years in Cooke County before he entered medical school. In 1913, he was graduated from Baylor University College of Medicine, then located in Dallas, and continued his internship at Parkland Hospital, Dallas, for 11 months. He was on the clinical staff of St. Paul's Sanatarium for many years.

DR. J. L. DAWSON

From 1914 until 1916, he practiced in Valley View. After World War I, in 1918, he opened his office in Dallas, where he practiced until his retirement in 1949.

During World War I he served as a captain with the United States Army Medical Corps in France.

Besides honorary membership in Texas Medical Association, he belonged to the American Medical Association, and the Dallas County Medical Society. His church was Highland Park Presbyterian in Dallas.

Survivors include three brothers, Arch Dawson, Wichita Falls; Walter Dawson, Corona, Calif.; and Homer W. Dawson, Grand Prairie.